LG Chem, Ltd. and Subsidiaries

Consolidated Financial Statements
December 31, 2013 and 2012

LG Chem, Ltd. and Subsidiaries
Index
December 31, 2013 and 2012

Page(s)

Report of Independent Auditors

To the Board of Directors and Shareholders of
LG Chem, Ltd.

We have audited the accompanying consolidated statements of financial position of LG Chem, Ltd. and its subsidiaries (collectively the "Company") as of December 31, 2013 and 2012, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for the years then ended, expressed in Korean won. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We did not audit the financial statements of Ningbo LG Yongxing Chemical Co., Ltd. and certain other consolidated subsidiaries, whose financial statements represent 13% of the Company's consolidated total assets as of December 31, 2013 (2012: 18%), and represent 14% of the Company's consolidated total revenue for the year ended December 31, 2013 (2012: 19%). These financial statements were audited by other auditors whose reports have been furnished to us, and our opinion, insofar as it relates to the amounts included for these subsidiaries, is based solely on the reports of the other auditors.

We conducted our audits in accordance with auditing standards generally accepted in the Republic of Korea. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits and the reports of the other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audits and the reports of other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of LG Chem, Ltd. and its subsidiaries as of December 31, 2013 and 2012, and their financial performance and cash flows for the years then ended, in conformity with International Financial Reporting Standards as adopted by the Republic of Korea ("Korean IFRS").

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries. Accordingly, this report is for use by those who are informed about Korean auditing standards and their application in practice.

Samil PricewaterhouseCoopers

Seoul, Korea
March 6, 2014

This report is effective as of March 6, 2014, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

LG Chem, Ltd. and Subsidiaries
Consolidated Statements of Financial Position
December 31, 2013 and 2012

(in millions of Korean won)	**Notes**	**2013**	**2012**
Assets			
Current assets			
Cash and cash equivalents	3, 5, 6	1,399,054	720,767
Trade receivables	3, 5, 7, 33	3,220,504	3,131,051
Other receivables	3, 5, 7, 33	640,998	772,746
Prepaid income taxes		2,171	7,314
Other financial assets	3, 5, 8, 10	-	2,352
Other current assets	15	204,859	190,778
Inventories	11	2,564,031	2,627,930
Total current assets		8,031,617	7,452,938
Non-current assets			
Other receivables	3, 5, 7	25,026	20,718
Other financial assets	3, 5, 8, 9	5,952	21,811
Investments in associates and joint ventures	1, 12, 35	447,867	405,068
Deferred income tax assets	30	77,069	57,525
Property, plant and equipment	13	8,559,609	8,348,178
Intangible assets	14	263,093	233,893
Other non-current assets	15	36,231	41,022
Total non-current assets		9,414,847	9,128,215
Total assets		17,446,464	16,581,153
Liabilities and equity			
Liabilities			
Current liabilities			
Trade payables	3, 5, 33	1,268,291	1,522,395
Other payables	3, 5, 33	838,021	766,231
Borrowings	3, 5, 16	2,206,848	1,751,781
Other financial liabilities	3, 5, 8, 10	-	154
Provisions	17	2,045	1,943
Current income tax liabilities	30	134,946	142,901
Other current liabilities	5, 19	147,726	152,607
Total current liabilities		4,597,877	4,338,012
Non-current liabilities			
Other payables	3, 5	76,346	15,070
Borrowings	3, 5, 16	803,634	1,195,126
Provisions	17	17,481	11,263
Net defined benefit liability	18	51,911	105,901
Deferred income tax liabilities	30	173,553	150,426
Total non-current liabilities		1,122,925	1,477,786
Total liabilities		5,720,802	5,815,798

LG Chem, Ltd. and Subsidiaries
Consolidated Statements of Financial Position
December 31, 2013 and 2012

(in millions of Korean won)	**Notes**	**2013**	**2012**
Equity			
Equity attributable to owners of the parent			
Share capital	1, 21	369,500	369,500
Capital surplus		1,157,772	1,157,772
Other components of equity	23	(15,699)	(15,699)
Accumulated other comprehensive income		(87,259)	(86,977)
Retained earnings	22	10,172,632	9,204,703
		11,596,946	10,629,299
Non-controlling interests		128,716	136,056
Total equity		11,725,662	10,765,355
Total liabilities and equity		17,446,464	16,581,153

The accompanying notes are an integral part of these consolidated financial statements.

LG Chem, Ltd. and Subsidiaries
Consolidated Statements of Income
Years Ended December 31, 2013 and 2012

(in millions of Korean won, except per share amounts)	Notes	2013	2012
Revenue	33, 35	23,143,612	23,263,019
Cost of sales	25, 33	(19,834,673)	(19,955,076)
Gross profit		3,308,939	3,307,943
Selling, general and administrative expenses	24, 25, 33	(1,565,895)	(1,397,620)
Operating profit	35	1,743,044	1,910,323
Finance income	5, 27	203,420	99,990
Finance expenses	5, 27	(236,554)	(153,938)
Share of profit of associates and joint ventures	12	5,388	12,420
Other non-operating income	5, 28	362,351	371,853
Other non-operating expenses	5, 29	(476,353)	(360,150)
Profit before income tax	34	1,601,296	1,880,498
Income tax expense	30	(330,683)	(374,153)
Profit for the year		1,270,613	1,506,345
Attributable to:			
Owners of the parent		1,265,968	1,494,487
Non-controlling interests		4,645	11,858
Earnings per share for profit attributable			
to owners of the parent (in won)	31		
Basic and diluted earnings per ordinary share			
for profit for the year		17,211	20,318
Basic and diluted earnings per preferred share			
for profit for the year		17,261	20,368

The accompanying notes are an integral part of these consolidated financial statements.

LG Chem, Ltd. and Subsidiaries
Consolidated Statements of Comprehensive Income
Years Ended December 31, 2013 and 2012

(in millions of Korean won)	**Notes**	**2013**	**2012**
Profit for the year		1,270,613	1,506,345
Other comprehensive income (loss)			
Items not reclassifiable subsequently to profit or loss:			
Remeasurements of the net defined benefit liability	18	(3,590)	(62,237)
Shares of actuarial loss from associates		(41)	(75)
Income tax effect relating to components of other comprehensive income	30	868	15,062
Items reclassifiable subsequently to profit or loss:			
Currency translation differences		3,463	(74,458)
Cash flow hedges		154	527
Others		(2,508)	(9,778)
Income tax effect relating to components of other comprehensive income	30	529	199
Other comprehensive loss for the year, net of tax		(1,125)	(130,760)
Total comprehensive income for the year		1,269,488	1,375,585
Attributable to:			
Owners of the parent		1,262,923	1,371,658
Non-controlling interests		6,565	3,927

The accompanying notes are an integral part of these consolidated financial statements.

LG Chem, Ltd. and Subsidiaries
Consolidated Statements of Changes in Equity
Years Ended December 31, 2013 and 2012

(in millions of Korean won)		Attributable to owners of the parent							
	Notes	**Share capital**	**Capital surplus**	**Other components of equity**	**Accumulated other comprehensive income**	**Retained earnings**	**Total**	**Non-controlling interests**	**Total equity**
Balance at January 1, 2012		369,500	1,157,772	(15,699)	(11,398)	8,053,307	9,553,482	154,197	9,707,679
Comprehensive income:									
Profit for the year		-	-	-	-	1,494,487	1,494,487	11,858	1,506,345
Remeasurements of the net defined benefit liability	18	-	-	-	-	(47,175)	(47,175)	-	(47,175)
Currency translation differences		-	-	-	(66,242)	-	(66,242)	(7,931)	(74,173)
Cash flow hedges		-	-	-	399	-	399	-	399
Others		-	-	-	(9,736)	(75)	(9,811)	-	(9,811)
Total comprehensive income		-	-	-	(75,579)	1,447,237	1,371,658	3,927	1,375,585
Transactions with owners:									
Dividends	32	-	-	-	-	(294,520)	(294,520)	(21,627)	(316,147)
Others		-	-	-	-	(1,321)	(1,321)	(441)	(1,762)
Total transactions with owners		-	-	-	-	(295,841)	(295,841)	(22,068)	(317,909)
Balance at December 31, 2012		369,500	1,157,772	(15,699)	(86,977)	9,204,703	10,629,299	136,056	10,765,355
Balance at January 1, 2013		369,500	1,157,772	(15,699)	(86,977)	9,204,703	10,629,299	136,056	10,765,355
Comprehensive income:									
Profit for the year		-	-	-	-	1,265,968	1,265,968	4,645	1,270,613
Remeasurements of the net defined benefit liability	18	-	-	-	-	(2,722)	(2,722)	-	(2,722)
Currency translation differences		-	-	-	2,010	-	2,010	1,920	3,930
Cash flow hedges		-	-	-	117	-	117	-	117
Others		-	-	-	(2,409)	(41)	(2,450)	-	(2,450)
Total comprehensive income		-	-	-	(282)	1,263,205	1,262,923	6,565	1,269,488
Transactions with owners:									
Dividends	32	-	-	-	-	(294,520)	(294,520)	(13,653)	(308,173)
Others		-	-	-	-	(756)	(756)	(252)	(1,008)
Total transactions with owners		-	-	-	-	(295,276)	(295,276)	(13,905)	(309,181)
Balance at December 31, 2013		369,500	1,157,772	(15,699)	(87,259)	10,172,632	11,596,946	128,716	11,725,662

The accompanying notes are an integral part of these consolidated financial statements.

LG Chem, Ltd. and Subsidiaries
Consolidated Statements of Cash Flows
Years Ended December 31, 2013 and 2012

(in millions of Korean won)	**Notes**	**2013**	**2012**
Cash flows from operating activities			
Cash generated from operations	34	2,561,743	2,270,359
Interest received		38,317	25,699
Interest paid		(90,370)	(99,505)
Dividends received		1,407	1,560
Income taxes paid		(328,213)	(432,404)
Net cash generated from operating activities		2,182,884	1,765,709
Cash flows from investing activities			
Decrease in other receivables		1,234,072	178,411
Decrease in non-current other receivables		19,293	381
Proceeds from disposal of property, plant and equipment		8,099	9,267
Proceeds from disposal of intangible assets		383	1,999
Increase in other receivables		(1,121,188)	(812,724)
Increase in non-current other receivables		(23,428)	-
Increase in non-current other financial assets		(74)	(15,850)
Acquisition of investments in associates and joint ventures		(25,420)	(75,565)
Acquisition of property, plant and equipment		(1,360,673)	(1,907,427)
Acquisition of intangible assets		(41,322)	(33,100)
Net cash used in investing activities		(1,310,258)	(2,654,608)
Cash flows from financing activities			
Proceeds from borrowings		339,848	1,013,942
Repayments of borrowings		(230,245)	(451,684)
Dividends paid		(308,405)	(316,159)
Net cash provided by (used in) financing activities		(198,802)	246,099
Net increase(decrease) in cash and cash equivalents		673,824	(642,800)
Cash and cash equivalents at the beginning of year		720,767	1,379,379
Exchange gains (losses) on cash and cash equivalents		4,463	(15,812)
Cash and cash equivalents at the end of year		1,399,054	720,767

The accompanying notes are an integral part of these consolidated financial statements.

1. General information

General information about LG Chem, Ltd. (the “Parent Company”) and its subsidiaries (collectively “the Company”) is as follows:

1.1 The Parent Company

The Parent Company was spun off on April 1, 2001, from LG Chem Investment Ltd. (formerly LG Chemical Ltd.), to engage in the petrochemicals, industrial materials, and information and electronic materials business. It completed its registration process on April 3, 2001. The Parent Company’s shares have been listed on the Korea Stock Exchange since April 25, 2001.

The Parent Company merged with LG Daesan Petrochemical Ltd. on January 1, 2006, and with LG Petrochemical Co., Ltd. on November 1, 2007. The Parent Company also spun off its Industrial Materials segment to LG Hausys, Ltd. on April 1, 2009, and merged with LG Polycarbonate Ltd. on April 1, 2012.

As of December 31, 2013, the Parent Company has its manufacturing facilities in Yeosu, Daesan, Ochang, Cheongju, Ulsan, Naju, Iksan, Paju and Gimcheon.

The Parent Company is authorized to issue 292 million shares of ordinary shares with par value of ₩5,000 per share. As of December 31, 2013, the Parent Company has issued 66,271,100 ordinary shares (₩331,356 million) and 7,628,921 preferred shares (₩38,144 million). The largest shareholder of the Parent Company is LG Corp., which owns 33.53% of the Parent Company’s ordinary shares. Preferred shareholders have no voting rights but are entitled to receive dividends at a rate 1% more than those paid to ordinary shareholders.

1.2 Business overview

The Company is engaged in petrochemicals business, information and electronic materials, and batteries business. The petrochemical business includes production of olefin petrochemicals such as ethylene, propylene, butadiene from Naphtha and aromatic petrochemicals such as benzene, xylene, toluene, and production of synthetic resin, synthetic rubber, and synthetic components from olefin and aromatic petrochemicals. This business is regarded as important as it provides primary materials to other industries and bears characteristics of large-volume process industry. The Company’s major products are ethylene, polyethylene, propylene, synthetic rubber, polyvinyl chloride (PVC), plasticizer, acrylate, acrylonitrile -butadiene-styrene (ABS), epoxy resin, and others.

The information and electronic materials business manufactures and supplies electronic materials such as optical material including 3D FPR, sensitized material, OLED-related materials and PCB materials. The Company produces Liquid Crystal Display Glass based on the source technology licensed from SCHOTT Solar, Inc., a Germany-based company, combining with its high-quality production techniques.

The batteries business manufactures and supplies batteries ranging from small batteries for portable media devices such as laptop computers, camcorders, mobiles and PDA to battery for electric vehicles and batteries for energy storage system. Currently, the battery division for electronic vehicles is in its position to supply to major domestic/foreign car manufacturing companies.

1.3 Consolidated subsidiaries, associates and joint ventures

	December 31, 2013			
	Percentage of ownership (%)	**Business location**	**Fiscal year-end**	**Business activities**
Consolidated subsidiaries				
Tianjin LG Dagu Chemical Co., Ltd.	75	China	December 31	PVC manufacturing and sales
Ningbo LG Yongxing Chemical Co., Ltd.[1]	75	China	December 31	ABS/SBL manufacturing and sales
Ningbo Zhenhai LG Yongxing Trading Co., Ltd.[1]	75	China	December 31	ABS sales
LG Chem HK Ltd.	100	Hong Kong	December 31	Sales and trading
LG Chem America, Inc.	100	USA	December 31	Sales and trading
LG Chemical India Pvt. Ltd. [2]	100	India	December 31	Syntetic resins manufacturing and sales
LG Polymer India Pvt. Ltd. [2]	100	India	December 31	PS manufacturing
LG Chemical (Guangzhou) Engineering Plastics Co., Ltd.	100	China	December 31	EP manufacturing and sales
LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd.	100	China	December 31	Battery/ Polarizer Manufacturing and sales
LG Chem (Taiwan), Ltd.	100	Taiwan	December 31	Polarizer manufacturing and sales
LG Chem Display Materials (Beijing) Co., Ltd.	100	China	December 31	Polarizer manufacturing
Tianjin LG Bohai Chemical Co.,Ltd.[4]	75	China	December 31	VCM, EDC manufacturing and sales
Tianjin LG BOTIAN Chemical Co., Ltd.[4]	56	China	December 31	SBS manufacturing and sales
LG Chem (China) Investment Co., Ltd.	100	China	December 31	China holding company
LG Chem (Tianjin) Engineering Plastics Co., Ltd.	100	China	December 31	ABS/EP manufacturing and sales
LG Chem Europe GmbH	100	Germany	December 31	Sales and trading
LG Chem Poland Sp. z.o.o	100	Poland	December 31	Polarizer manufacturing
LG Chem Michigan Inc.	100	USA	December 31	Medium&Large sized battery research and manufacturing
LG Chem Power Inc.	100	USA	December 31	Medium&Large sized battery research
LGC Petrochemical India Private Limited.[5]	100	India	December 31	Service
Haengboknuri [6]	100	Korea	December 31	Facility management and general cleaning
LG CHEM TK KIMYA SANAYI VE TICARET LIMITED SIRKETI [7]	100	Turkey	December 31	Sales and trading
Associates and Joint ventures				
LG Vina Chemical Co., Ltd.	40	Vietnam	December 31	DOP production and sales
HL Greenpower Co., Ltd.	49	Korea	December 31	Battery manufacturing for electric automobile
LG Holdings (HK) Ltd.	26	Hong Kong	December 31	Sales and trading
TECWIN Co., Ltd.	20	Korea	December 31	Environment solution and Construction of chemical plant
SEETEC Co., Ltd.	50	Korea	December 31	Plant utility and Distribution, research assistance service
LG Chem Brasil INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA. [8]	100	Brazil	December 31	Sales and trading
CNOOC & LG Petrochemicals Co., Ltd.	50	China	December 31	ABS manufacturing and sales
KLPE Limited Liability Partnership [9]	50	Kazakhstan	December 31	PE manufacturing and sales
LG Fuel Cell Systems Inc.[10]	18	USA	December 31	Power fuel cell research

[1] As of December 31, 2013, Ningbo LG Yongxing Chemical Co., Ltd. owns 100% of Ningbo Zhenhai LG Yongxing Trade Co., Ltd. shares.

[2] As of December 31, 2013, LG Chemical India Pvt. Ltd. owns 100% of LG Polymer India Pvt. Ltd. shares.

[3] During the year, the Parent Company acquired additional shares of LG Chem (Nanjing) Information & Electronics Materials Co., Ltd. for ₩29,076 million.

[4] As of December 31, 2013, Tianjin LG Bohai Chemical Co., Ltd. owns 20.30% of Tianjin LG BOTIAN Chemical Co., Ltd. shares.

[5] LGC Petrochemical India Private Limited was established during the year, and the Parent Company newly acquired 100% of its shares for ₩299 million.

[6] Haengboknuri was established during the year, and the Parent Company newly acquired 100% of its shares for ₩600 million.

[7] LG CHEM TK KIMYA SANAYI VE TICARET LIMITED SIRKETI was established during the year, and the Parent Company newly acquired 100% of its shares for ₩174 million.

[8] Classified as an investment in associate due to its small scale, and the Parent Company acquired additional shares of LG Chem BRASIL INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA for ₩321 million.

[9] During the year, the Parent Company acquired additional shares of KLPE Limited Liability Partnership for ₩18,680 million.

[10] During the year, investment into LG Fuel Cell Systems Inc. was reclassified from available for-sale financial assets to investment in associate as the Parent Company can exercise significant influence as the executive of the Parent Company is a member of the board of directors of LG Fuel Cell Systems Inc. In addition, LG Fuel Cell Systems Inc. issued new shares with disproportionate rights during the year and the Parent Company acquired its additional shares for ₩6,419 million. As a result, the Parent Company's percentage of ownership increased to 18% (Note 12).

1.4 Summarized financial information of subsidiaries, associates and joint ventures

Summarized financial information (before elimination of intercompany transactions) of subsidiaries, associates and joint ventures is as follows:

(in millions of Korean won)	December 31, 2013				
	Assets	**Liabilities**	**Equity**	**Revenue**	**Profit(loss) for the year**
Consolidated subsidiaries					
Tianjin LG DAGU Chemical Co., Ltd.	205,089	128,586	76,503	421,332	(5,272)
Ningbo LG Yongxing Chemical Co., Ltd.	754,027	422,303	331,724	1,884,097	39,298
LG Chem HK Ltd.	151,726	137,091	14,635	605,212	735
LG Chem America, Inc.	134,543	121,895	12,648	622,905	1,904
LG Chemical India Pvt. Ltd.	32,617	131	32,486	1,445	216
LG Polymers India Pvt. Ltd.	101,120	55,099	46,021	238,882	3,234
LG Chemical (Guangzhou) Engineering Plastics Co., Ltd.	96,086	51,182	44,904	174,437	6,103
LG Chem (Nanjing) Information & Electronics Materials Co., Ltd.	1,379,626	832,963	546,663	1,724,065	50,480
LG Chem (Taiwan), Ltd.	184,398	113,877	70,521	414,542	17,467
LG Chem Display Materials (Beijing) Co., Ltd.	26,596	4,352	22,244	14,573	1,173
Tianjin LG Bohai Chemical Co., Ltd.	371,675	172,954	198,721	471,838	(7,246)
LG Chem (China) Investment Co., Ltd.	180,918	97,844	83,074	32,737	3,695
LG Chem (Tianjin) Engineering Plastics Co.,Ltd.	71,319	33,324	37,995	110,968	5,649
LG Chem Europe GmbH	84,226	70,714	13,512	241,170	2,305
LG Chem Poland Sp. z o.o.	45,239	26,809	18,430	74,309	4,251
LG Chem Michigan Inc.	174,008	147,684	26,324	1,208	(14,581)
LG Chem Power Inc.	9,934	9,553	381	21,333	347
Tianjin LG BOTIAN Chemical Co., Ltd.	70,250	76,338	(6,088)	138,999	(2,865)
Ningbo Zhenhai LG Yongxing Trading Co., Ltd.	7,118	5,627	1,491	15,349	147
LGC Petrochemical India Private Limited.	371	6	365	451	118
Haengboknuri	1,182	503	679	1,797	79
LG CHEM TK KIMYA SANAYI VE TICARET LIMITED SIRKETI	622	384	238	964	92
Associates and joint ventures					
LG Vina chemical Co., Ltd.	25,428	16,746	8,682	73,171	2,417
HL Greenpower Co., Ltd.	64,627	30,452	34,175	127,035	2,433
LG Holdings (HK) Ltd.	374,511	137,538	236,973	45,192	11,333
TECWIN Co., Ltd.	45,619	15,778	29,841	83,852	3,040
SEETEC Co., Ltd.	399,798	50,563	349,235	573,102	16,020
LG Chem Brasil INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	142	64	78	892	(336)
CNOOC & LG Petrochemicals Co., Ltd.	214,226	136,737	77,489	-	(2,053)
KLPE Limited Liability Partnership	210,585	42,007	168,578	-	(2,920)
LG Fuel Cell Systems Inc.	35,757	9,653	26,104	4,946	(47,068)

(in millions of Korean won)	December 31, 2012				
	Assets	**Liabilities**	**Equity**	**Revenue**	**Profit(loss) for the year**
Consolidated subsidiaries					
Tianjin LG DAGU Chemical Co., Ltd.	206,570	125,990	80,580	423,628	(6,292)
Ningbo LG Yongxing Chemical Co., Ltd.	753,128	426,398	326,730	1,862,728	56,436
LG Chem HK Ltd.	150,860	136,736	14,124	615,340	1,453
LG Chem America, Inc.	124,318	113,329	10,989	576,090	2,233
LG Chemical India Pvt. Ltd.	32,577	117	32,460	1,824	134
LG Polymers India Pvt. Ltd.	89,400	40,331	49,069	214,108	6,545
LG Chemical (Guangzhou) Engineering Plastics Co., Ltd.	81,606	43,177	38,429	145,145	4,134
LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd.	1,158,794	706,676	452,118	1,587,822	38,334
LG Chem (Taiwan), Ltd.	153,824	97,504	56,320	308,017	6,777
LG Chem Display Materials (Beijing) Co., Ltd.	22,583	1,756	20,827	15,885	1,710
Tianjin LG Bohai Chemical Co., Ltd.	397,646	177,923	219,723	484,948	11,862
LG Chem (China) Investment Co., Ltd.	86,121	7,130	78,991	32,005	4,067
LG Chem (Tianjin) Engineering Plastics Co., Ltd.	76,712	44,679	32,033	113,645	4,474
LG Chem Europe GmbH	57,335	46,442	10,893	159,585	3,470
LG Chem Poland Sp. z o.o.	30,400	16,392	14,008	32,455	(3,199)
LG Chem Michigan Inc.	163,941	122,925	41,016	-	(8,554)
LG Chem Power Inc.	15,673	15,599	74	21,684	(2,227)
Tianjin LG BOTIAN Chemical Co., Ltd.	83,719	86,961	(3,242)	162,216	(10,235)
Ningbo Zhenhai LG Yongxing Trading Co., Ltd.	2,356	1,025	1,331	14,272	150
Associates and joint ventures					
LG Vina chemical Co., Ltd	26,357	17,169	9,188	80,224	3,271
HL Greenpower Co., Ltd.	93,676	61,925	31,751	107,647	2,686
LG Holdings (HK) Ltd.	374,780	151,013	223,767	40,267	8,454
TECWIN Co., Ltd.	51,890	24,790	27,100	99,792	3,780
SEETEC Co., Ltd.	373,833	40,532	333,301	488,218	12,436
LG Chem Brasil INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	361	217	144	1,375	55
CNOOC & LG Petrochemicals Co., Ltd.	90,572	12,085	78,487	-	(1,260)
KLPE Limited Liability Partnership	141,258	485	140,773	-	(1,792)

2. Summary of significant accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are summarized below. These policies have been consistently applied to all years presented, unless otherwise stated.

2. 1 Basis of preparation

The Company maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with the International Financial Reporting Standards as adopted by the Republic of Korea (“Korean IFRS”). The accompanying consolidated financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

Certain information attached to the Korean language financial statements, but not required for a fair presentation of the Company's financial position, financial performance or cash flows, is not presented in the accompanying consolidated financial statements.

The Company’s financial statements for the annual period, have been prepared in accordance with Korean IFRS. These are the standards, subsequent amendments and related interpretations issued by the International Accounting Standards Board ("IASB") that have been adopted by the Republic of Korea.

The preparation of the consolidated financial statements requires the use of certain critical accounting estimates. It also requires management to exercise judgment in the process of applying the Company’s accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

2.2 Changes in accounting policy and disclosures

(a) New and amended standards adopted by the Company

The Company newly applied the following amended and enacted standards for the annual period beginning on January 1, 2013:

- Amendment to Korean IFRS 1001, *Presentation of Financial Statements: Presentation of Items of Other Comprehensive Income*

The amendment requires entities to group items presented in other comprehensive income based on whether they are potentially reclassifiable to profit or loss subsequently. The Company applies the amendment retroactively and there is no impact of the application of this amendment on its total comprehensive income or loss.

- Amendment to Korean IFRS 1019, *Employee Benefits*

The amendment requires entities to immediately recognize all actuarial gains and losses incurred in other comprehensive income or loss. All past service costs incurred are immediately recognized in accordance with the change of the plan, and the previous separate calculation of the interest cost and the expected returns on plan assets has been revised to calculate net interest expense (income) by applying the discount rate used in the defined benefit obligation measurement in the net defined benefit liabilities (assets). There is no material impact of the application of this amendment on the consolidated financial statements.

- Korean IFRS 1110, *Consolidated Financial Statements*

Korean IFRS 1110, *Consolidated Financial Statements*, introduces a single control concept and provides a specific guidance for the control. The adoption of this standard does not have an impact on consolidation scope in the consolidated financial statements.

- Korean IFRS 1111, *Joint Arrangements*

Korean IFRS 1111, *Joint Arrangements*, reflects the substance of joint arrangements and focuses on the rights and obligations of the parties to the joint arrangements rather than on the legal forms of the arrangements. Joint arrangements are classified into joint operations or joint ventures. The adoption of this standard does not have an impact on the consolidated financial statements.

- Korean IFRS 1112, *Disclosures of Interests in Other Entities*

Korean IFRS 1112, *Disclosure of Interests in Other Entities*, provides disclosure requirements for all types of equity investments in other entities including subsidiaries, associates, joint ventures and unconsolidated structured entities.

- Korean IFRS 1027, *Separate Financial Statements*

Korean IFRS 1027, *Separate Financial Statements,* contains accounting treatments and requirements for investments in subsidiaries, associates and joint ventures relating only to separate financial statements of the Controlling Company.

- Korean IFRS 1113, *Fair Value Measurement*

Korean IFRS 1113, *Fair Value Measurement*, provides a precise definition of fair value, and a single source of fair value measurement and disclosure requirements for use across K-IFRS. The Company has applied this standard prospectively according to the transitional provisions of K-IFRS 1113 and there is no material impact of the application of this standard on the consolidated financial statements.

(b) New standards and interpretations not yet adopted

New standards, amendments and interpretations issued but not effective for the financial year beginning January 1, 2013, and not early adopted by the Company are as follows:

- Amendment to Korean IFRS 1110, *Consolidated Financial Statements*

Amendment to Korean IFRS 1110, *Consolidated Financial Statements*, provides that, if a parent company qualifies as an investment entity, it is required to measure its investments in subsidiaries at fair value through profit and loss instead of consolidating these subsidiaries in its consolidated financial statements. The amendment does not apply for a parent of an investment entity if the parent itself is not an investment entity. This amendment is effective for annual periods beginning on or after January 1, 2014, with early adoption permitted. The Company expects that the application of this interpretation would not have a material impact on its consolidated financial statements.

- Amendment to Korean IFRS 1032, *Financial Instruments: Presentation*

Amendment to Korean IFRS 1032, *Financial Instruments: Presentation*, provides that the right to offset must not be contingent on a future event and must be legally enforceable in all of circumstances; and if an entity can settle amounts in a manner such that outcome is, in effect, equivalent to net settlement, the entity will meet the net settlement criterion. This amendment is effective for annual periods beginning on or after January 1, 2014, and the Company expects that the application of this interpretation would not have a material impact on its consolidated financial statements.

- Amendment to Korean IFRS 1039, *Financial Instruments: Recognition and Measurement*

Amendment to Korean IFRS 1039, *Financial Instruments: Recognition and Measurement*, allows the continuation of hedge accounting for a derivative that has been designated as a hedging instrument in a circumstance in which that derivative is novated to a central counterparty (CCP) as a consequence of laws or regulations. This amendment is effective for annual periods beginning on or after January 1, 2014, with early adoption permitted. The Company expects that the application of this interpretation would not have a material impact on its consolidated financial statements.

- Enactment of Korean IFRS 2121, *Levies*

Korean IFRS 2121, *Levies*, are applied to a liability to pay a levy imposed by a government in accordance with the legislation. The interpretation requires that the liability to pay a levy is recognized when the activity that triggers the payment of the levy occurs, as identified by the legislation (the obligating event). This interpretation is effective for annual periods beginning on or after January 1, 2014, with early adoption permitted. The Company expects that the application of this interpretation would not have a material impact on its consolidated financial statements.

2.3 Consolidation

The Company has prepared the consolidated financial statements in accordance with Korean IFRS 1110, *'Consolidated financial statements'*.

(1) Subsidiaries

Subsidiaries are all entities (including special purpose entities) over which the Company has control. The Company controls the corresponding investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Consolidation of a subsidiary begins from the date the Company obtains control of a subsidiary and ceases when the Company loses control of the subsidiary.

The Company applies the acquisition method to account for business combinations. The consideration transferred is measured at the fair values of the assets transferred, and identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are initially measured at their fair values at the acquisition date. The Company recognizes any non-controlling interest in the acquiree on an acquisition-by-acquisition basis in the event of liquidation, either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of acquiree's identifiable net assets. All other non-controlling interests are measured at their acquisition-date fair values, unless another measurement basis is required by IFRSs. Acquisition-related costs are expensed as incurred.

Goodwill is recognized as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interest in the acquiree, and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree over the identifiable net assets acquired. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss.

Balances of receivables and payables, income and expenses and unrealized gains on transactions between the Company subsidiaries are eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Company.

(2) Changes in ownership interests in subsidiaries without change of control

In transactions with non-controlling interests, which do not result in loss of control, the Company recognizes directly in equity any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received, and attribute it to the owners of the parent.

(3) Associates

Associates are all entities over which the Company has significant influence, and investments in associates are initially recognized at acquisition cost using the equity method. Unrealized gains on transactions between the Company and its associates are eliminated to the extent of the Company's interest in the associates. If there is any objective evidence that the investment in the associate is impaired, the Company recognizes the difference between the recoverable amount of the associate and its book value as impairment loss.

(4) Joint *Arrangements*

A joint arrangement of which two or more parties have joint control is classified as either a joint operation or a joint venture. A joint operator has rights to the assets, and obligations for the liabilities, relating to the joint operation and recognizes the assets, liabilities, revenues and expenses relating to its interest in a joint operation. A joint venturer has rights to the net assets relating to the joint venture and accounts for that investment using the equity method.

2.4 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker (Note 35). The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Corporate Management Committee that makes strategic decisions.

2.5 Foreign currency translation

(1) Functional and presentation currency

Items included in the financial statements of each of the Company's entities are measured using the currency of the primary economic environment in which the each entity operates (the "functional currency'). The consolidated financial statements are presented in Korean won, which is the Parent Company's functional and presentation currency.

(2) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in profit or loss.

Exchange differences arising on non-monetary financial assets and liabilities such as equity instruments at fair value through profit or loss and available-for-sale equity instruments are recognized in profit or loss and included in other comprehensive income, respectively, as part of the fair value gain or loss.

(3) Consolidated companies

The results and financial position of all consolidated entities that have a functional currency different from the presentation currency are translated as follows:

i) assets and liabilities for each statement of financial position presented are translated at the closing rate at the end of the reporting period;
ii) income and expenses for each statement of income are translated at average exchange rates; and
iii) equity is translated at the historical exchange rate; and
iv) all resulting exchange differences are recognized in other comprehensive income.

2.6 Financial assets

(a) Classification and measurement

The Company classifies its financial assets in the following categories: financial assets at fair value through profit or loss, available-for-sale financial assets, loans and receivables, and held-to-maturity financial assets. Regular purchases and sales of financial assets are recognized on trade date.

At initial recognition, financial assets are measured at fair value plus, in the case of financial assets not carried at fair value through profit or loss, transaction costs. Transaction costs of financial assets carried at fair value through profit or loss are expensed in the statement of income. After the initial recognition, available-for-sale financial assets and financial assets at fair value through profit or loss are subsequently carried at fair value. Loans and receivables, and held-to-maturity investments are subsequently carried at amortized cost using the effective interest rate method.

Changes in fair value of financial assets at fair value through profit or loss are recognized in profit or loss and changes in fair value of available-for-sale financial assets are recognized in other comprehensive income. When the available-for-sale financial assets are sold or impaired, the fair value adjustments recorded in equity are reclassified into profit or loss.

(b) Impairment

The Company assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or a group of financial assets that can be reliably estimated.

Impairment of loans and receivables is presented as a deduction in an allowance account. Impairment of other financial assets is directly deducted from their carrying amount. The Company writes off financial assets when the assets are determined to be no longer recoverable.

The objective evidence that a financial asset is impaired includes significant financial difficulty of the issuer or obligor; a delinquency in interest or principal payments over three months; or the disappearance of an active market for that financial asset because of financial difficulties. A significant or a prolonged decline in the fair value of an available-for-sale equity instrument below its cost is also objective evidence of impairment.

(c) Derecognition

If the Company transfers a financial asset and the transfer does not result in derecognition because the Company has retained substantially of all risks and rewards of ownership of the transferred asset due to a recourse in the event the debtor defaults, the Company continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The related financial liability is classified as ‘borrowings’ in the statement of financial position (Note 16).

2.7 Derivative financial instruments

Derivatives are initially recognized at fair value on the date when a derivative contract is entered into and are subsequently re-measured at their fair value. Changes in the fair value of the derivatives that are not qualified for hedge accounting are recognized in the statement of income within 'other non-operating income (expenses)' or 'finance income (expenses)' according to the nature of transactions.

2.8 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using weighted average cost method except goods in transit which is determined using the specific identification method.

2.9 Property, plant and equipment

Property, plant and equipment is stated at its cost less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditures that is directly attributable to the acquisition of the items.

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate the difference between their cost and their residual values over their estimated useful lives, as follows:

Buildings	25 - 50 years
Structures	15 - 50 years
Machinery	6 - 15 years
Others	1 - 6 years

The depreciation method, residual values and useful lives of property, plant and equipment are reviewed at the end of each reporting period and, if appropriate, accounted for as changes in accounting estimates.

2.10 Borrowing costs

Borrowing costs incurred in the acquisition or construction of a qualifying asset are capitalized in the period when it is prepared for its intended use, and investment income earned on the temporary investment of borrowings made specifically for the purpose obtaining a qualifying asset is deducted from the borrowing costs eligible for capitalization during the period. Other borrowing costs are recognized as expenses for the period in which they are incurred.

2.11 Government grants

Government grants are recognized at their fair values when there is reasonable assurance that the grant will be received and the Company will comply with the conditions attaching to it. Government grants related to assets are presented by deducting the grants in arriving at the carrying amount of the assets, and grants related to income are deferred and presented by deducting the related expenses for the purpose of the government grants.

2.12 Intangible assets

Goodwill is measured as explained in Note 2.3(1). Goodwill arising on the acquisition of subsidiaries and business is included in intangible assets and goodwill arising on the acquisition of associates is included in investments in associates. Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the CGUs, or group of CGUs, that is expected to benefit from the synergies of the combination. Goodwill is monitored at the operating segment level.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs to sell. Any impairment is recognized immediately as an expense and is not subsequently reversed.

Intangible assets, except for goodwill, are initially recognized at its historical cost and carried at its cost less accumulated amortization and accumulated impairment losses.

Internally generated software development costs are the aggregate costs recognized after meeting the asset recognition criteria, including technical feasibility, and determined to have future economic benefits. Membership rights are regarded as intangible assets with indefinite useful life and not amortized because there is no foreseeable limit to the period over which the assets are expected to be utilized. Intangible assets with definite useful life that are amortized using the straight-line method over their estimated useful lives, are as follows:

Development costs	3 - 6 years
Industrial property rights	5 - 15 years
Others	6 - 20 years

2.13 Research and development

Costs associated with research are recognized as an expense as incurred. Costs that are identifiable, controllable and directly attributable to development projects are recognized as intangible assets when the following criteria are met:

- It is technically feasible to complete the development project so that it will be available for use;
- Management intends to complete the development project and use or sell it;
- There is an ability to use or sell the development project;
- It can be demonstrated how the development project will generate probable future economic benefits;
- Adequate technical, financial and other resources to complete the development and to use or sell the development project are available; and
- The expenditure attributable to the development project during its development can be reliably measured.

Other development expenditures that do not meet these criteria are recognized as an expense as incurred. Development costs previously recognized as an expense are not recognized as an asset in a subsequent period. Capitalized development costs that are recognized as intangible assets are amortized using the straight-line method over their estimated useful lives of three to six years when the assets are available for use and are tested for impairment.

2.14 Impairment of non-financial assets

Goodwill or intangible assets with indefinite useful lives are not subject to amortization and are tested annually for impairment. Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. Non-financial assets, other than goodwill, that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

2.15 Financial Liabilities

(a) Classification and measurement

Financial liabilities at fair value through profit or loss are financial instruments held for trading. Financial liabilities are classified in this category if incurred principally for the purpose of repurchasing them in the near term. Derivatives that are not designated as hedges or bifurcated from financial instruments containing embedded derivatives are also categorized as held-for-trading.

The Company classifies non-derivative financial liabilities, except for financial liabilities at fair value through profit or loss, financial guarantee contracts and financial liabilities that arise when a transfer of financial assets does not qualify for derecognition, as financial liabilities carried at amortized cost and presented as 'trade payables', 'borrowings', and 'other payables' in the statement of financial position.

(b) Derecognition

Financial liabilities are removed from the statement of financial position when it is extinguished, for example, when the obligation specified in the contract is discharged, cancelled or expired or when the terms of an existing financial liability are substantially modified.

2.16 Current and deferred income tax

The tax expense for the period consists of current and deferred tax. Tax is recognized on the profit for the period in the statement of income, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively. The tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period.

Deferred tax is recognized for temporary differences arising between the tax bases of assets and liabilities and their carrying amounts as expected tax consequences at the recovery or settlement of the carrying amounts of the assets and liabilities. However, deferred tax assets and liabilities are not recognized if they arise from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences can be utilized.

Deferred tax liability is recognized for taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. In addition, deferred tax asset is recognized for deductible temporary differences arising from such investments to the extent that it is probable the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

2.17 Provisions

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation and the increase in the provision due to passage of time is recognized as interest expense.

2.18 Employee benefits

The Company has both defined benefit and defined contribution plans. A defined contribution plan is a pension plan under which the Company pays fixed contributions into a separate entity. The contributions are recognized as employee benefit expenses when an employee has rendered service. A defined benefit plan is a pension plan that is not a defined contribution plan.

Typically defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds and that have terms to maturity approximating to the terms of the related pension obligation. The remeasurements of the net defined benefit liability are recognized in other comprehensive income.

If any plan amendments, curtailments, or settlements occur, past service costs or any gains or losses on settlement are recognized as profit or loss for the year.

2.19 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable for the sale of goods or rendering of services arising from the normal activities of the Company. It is stated as net of value added taxes, returns, rebates and discounts, after elimination of intra-company transactions.

The Company recognizes revenue when the amount of revenue can be reliably measured; when it is probable that future economic benefits will flow to the entity; and when specific criteria have been met for each of the Company's activities, as described below. The Company bases its estimate on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

(a) Sales of goods

Sales of goods are recognized upon delivery of products to customers. The Company recognizes provisions for product warranties and sales returns based on reasonable expectation reflecting warranty obligation and sales return rates incurred historically.

(b) Interest income

Interest income is recognized using the effective interest method. When a loan and receivable is impaired, the Company reduces the carrying amount to its recoverable amount, and continues unwinding the discount as interest income. Interest income on impaired receivables is recognized using the original effective interest rate.

(c) Dividend income

Dividend income is recognized when the right to receive payment is established.

2.20 Leases

A lease is an agreement, whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time. Leases where all the risks and rewards of ownership are not transferred to the Company are classified as operating leases. Lease payments under operating leases are recognized as expenses on a straight-line basis over the lease term.

Leases where the Company has substantially all the risks and rewards of ownership are classified as finance leases and recognized as lease assets and liabilities at the lower of the fair value of the leased property and the present value of the minimum lease payments on the opening date of the lease period.

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership at the inception of the lease. A lease other than a finance lease is classified as an operating lease. Lease income from operating leases is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred by the lessor in negotiating and arranging an operating lease is added to the carrying amount of the leased asset and recognized as an expense over the lease term on the same basis as the lease income.

3. Financial risk management

3.1 Financial risk factors

The Company's activities expose it to a variety of financial risks: market risk, credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's financial performance. The Company uses derivative financial instruments to hedge certain exposures.

Risk management is carried out by the Company's finance team under policies approved by the Corporate Management Committee. The finance team identifies, evaluates and hedges financial risks in close co-operation with the Company's operating units. The Corporate Management Committee provides written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, and credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of surplus liquidity.

(1) Market risk

1) Foreign exchange risk

The Company operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar. Foreign exchange risk arises from future commercial transactions and recognized assets and liabilities.

Management has set up a policy to require consolidated companies to manage their foreign exchange risk against their functional currency. The Company manages maximum loss for currency risk exposures within acceptable range by using currency risk management model and hires employees who are exclusively responsible for currency risk management.

The Company has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk. Currency exposure arising from the net assets of the Company's foreign operations is managed primarily through borrowings denominated in the relevant foreign currencies.

As of December 31, 2013 and 2012, the Company's monetary assets and liabilities denominated in currencies other than its functional currency, are as follows:

(in millions of Korean won)	2013		2012	
	Assets	**Liabilities**	**Assets**	**Liabilities**
USD	1,982,900	2,466,188	1,887,144	2,437,724
EUR	65,178	93,749	48,383	69,940
JPY	23,922	94,583	25,701	148,685
GBP and others	3,848	3,734	1,863	5,155

As of December 31, 2013 and 2012, if the Company's functional currency had weakened / strengthened by 10% against the US dollar with all other variables held constant, profit for the year would have been affected as follows:

(in millions of Korean won)	2013		2012	
	10% Increase	**10% Decrease**	**10% Increase**	**10% Decrease**
USD	(48,329)	48,329	(55,058)	55,058

The above sensitivity analysis has been performed for monetary assets and liabilities denominated in foreign currencies other than the Company's functional currency at the reporting date.

2) Cash flow and fair value interest rate risk

Interest rate risk is defined as the risk that the interest income or expenses arising from deposits and borrowings will fluctuate because of changes in future market interest rate. The interest rate risk mainly arises through floating rate deposits and borrowings. The objective of interest rate risk management lies in maximizing corporate value by minimizing uncertainty caused by fluctuations in interest rates and minimizing net interest expense.

The Company adequately minimizes risks from interest rate fluctuations through various policies, such as sharing excess cash within the Company (internal cash sharing) to minimize external borrowings, avoiding high rate borrowings, reforming capital structure, managing an appropriate ratio of fixed rate borrowings and floating rate borrowings, monitoring a fluctuation of domestic and foreign interest rates daily, weekly and monthly, establishing alternatives, and balancing floating rate short-term borrowings with floating rate deposits.

The impact of 0.1% (10 basis points) higher/lower of interest rate with all other variables held constant on the Company's post-tax profit for the year and on equity as of December 31, 2013, is as follows:

(in millions of Korean won)	Impact on post-tax profit		Impact on equity	
	2013	**2012**	**2013**	**2012**
Increase	(1,639)	(1,607)	(1,639)	(1,607)
Decrease	1,639	1,607	1,639	1,607

(2) Credit risk

Credit risk is managed on a group basis. Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions.

As of December 31, 2013 and 2012, the maximum degrees of credit exposures are as follows :

(in millions of Korean won)	2013			2012		
	Before impairment	**Accumulated impairment loss**	**After impairment (maximum exposure)**	**Before impairment**	**Accumulated impairment loss**	**After impairment (maximum exposure)**
Loans and receivables (excluding cash on hand)	5,300,464	(14,951)	5,285,513	4,653,130	(10,110)	4,643,020
Financial assets at fair value through profit or loss	-	-	-	2,352	-	2,352
Total	5,300,464	(14,951)	5,285,513	4,655,482	(10,110)	4,645,372

In addition, details of financial guarantees provided by the Company are disclosed in Notes 3.1.(3) and 20.

The Company has established the following policies and procedures to manage credit risks.

To manage credit risks relating to trade receivables, the Company evaluates the credit rating of customers and determines credit limit for each customer based on the information provided by credit rating agencies and other available financial information before commencing business with customers. The credit risks relating to trade receivables are also mitigated by insurance contracts, collaterals as well as payment guarantees.

The Company has entered into export insurance contracts with Korea Trade Insurance Corporation to mitigate credit risks relating to export trade receivables to overseas customers. The Company is also provided with collaterals by customers depending on their credit rating or payment guarantees from the customers' financial institutions as necessary.

The Company has deposited its cash and cash equivalents and other long-term deposits in several financial institutions such as Woori Bank and Shinhan Bank. The Company has also entered into derivative contracts with several financial institutions. The Company maintains business relationship with those financial institutions with high credit ratings evaluated by independent credit rating agencies and accordingly, credit risks associated with these financial institutions are limited.

(3) Liquidity risk

Cash flow forecasting is performed by corporate finance team. Finance team monitors rolling forecasts of the Company's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Company does not breach borrowing limits or covenants on any of its borrowing facilities. Such forecasting takes into consideration the Company's debt financing plans, covenant compliance, compliance with internal statement of financial position ratio targets and, if applicable external regulatory or legal requirements - for example, currency restrictions.

1) The table below analyzes the Company's non-derivative financial liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date.

(in millions of Korean won)	**December 31, 2013**			
	Less than 1 year	**1 to 2 years**	**2 to 5 years**	**Over 5 years**
Borrowings (excluding finance lease liabilities)	2,345,659	485,874	355,533	278
Finance lease liabilities	3,195	-	-	-
Trade and other payables	2,106,478	51,154	25,192	-
Total	4,455,332	537,028	380,725	278

(in millions of Korean won)	**December 31, 2012**			
	Less than 1 year	**1 to 2 years**	**2 to 5 years**	**Over 5 years**
Borrowings (excluding finance lease liabilities)	1,770,631	496,794	801,771	284
Finance lease liabilities	2,481	3,195	-	-
Trade and other payables	2,288,782	15,652	-	-
Total	4,061,894	515,641	801,771	284

2) As of December 31, 2013, there is no outstanding balance of the Company's derivative financial liabilities. The table below analyzes the Company's derivative financial liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date as of December 31, 2012.

(in millions of Korean won)		**December 31, 2012**			
		Less than 1 year	**1 to 2 years**	**2 to 5 years**	**Over 5 years**
Net-settled derivative financial liabilities	**Hedging**				
	Net-cash flow	(154)	-	-	-
	Subtotal	(154)	-	-	-
Gross-settled derivative financial liabilities	**Trading**				
	Inflow	173,728	-	-	-
	Outflow	(171,376)	-	-	-
	Subtotal	2,352	-	-	-
	Total	2,198	-	-	-

3) The table below analyzes the Company's financial guarantee contracts into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date.

(in millions of Korean won)	December 31, 2013			
	Less than 1 year	1 to 2 years	2 to 5 years	Over 5 years
Financial guarantee contracts[1]	132	144	509	389

(in millions of Korean won)	December 31, 2012			
	Less than 1 year	1 to 2 years	2 to 5 years	Over 5 years
Financial guarantee contracts[1]	60,121	132	470	571

[1] The Company and LG Hausys Ltd. have provided the joint guarantee for obligations outstanding as of April 1, 2009, the spin-off date. The amounts represent the maximum amount of the guarantee allocated to the earliest period in which the guarantee could be called (Note 20).

3.2 Capital risk management

The Company's capital objectives are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, the Company monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated statement of financial position plus net debt.

The gearing ratio and debt-to-equity ratio as of December 31, 2013 and 2012, are as follows:

(in millions of Korean won, except for ratios)	2013	2012
Total borrowings (Note 16) (A)	3,010,482	2,946,907
Less: cash and cash equivalents (B)	(1,399,054)	(720,767)
Net debt (C=A+B)	1,611,428	2,226,140
Total liabilities (D)	5,720,802	5,815,798
Total equity (E)	11,725,662	10,765,355
Total capital (F=C+E)	13,337,090	12,991,495
Gearing ratio (C/F)	12.1%	17.1%
Debt-to-equity ratio (D/E)	48.8%	54.0%

3.3 Fair value

The table below analyzes financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

Level 1 : Quoted prices (unadjusted) in active markets for identical assets or liabilities.
Level 2 : Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
Level 3 : Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

As of December 31, 2013, there are no financial instruments measured at fair value. The following tables present the Company's financial assets and liabilities that are measured at fair value as of December 31, 2012:

(in millions of Korean won)	December 31, 2012			
	Level 1	**Level 2**	**Level 3**	**Total**
Financial assets				
Other current financial assets	-	2,352	-	2,352
Total financial assets	-	2,352	-	2,352
Financial liabilities				
Other current financial liabilities	-	154	-	154
Total financial liabilities	-	154	-	154

All other non-current financial assets of the Company consist of available-for-sale equity securities and are measured at cost (December 31, 2013: ₩ 5,952 million; December 31, 2012: ₩ 21,811 million) as the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed. These are not included in the analysis above (Note 9). The Company does not have any plans to dispose of these available-for-sale equity securities in the near future.

The fair value of financial instruments traded in active markets is based on quoted market prices at the reporting date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, an entity in the same industry, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Company is the current bid price. These instruments are included in level 1.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Company uses various techniques and makes judgments based on current market conditions. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2. The financial instruments included in Level 2 are derivative financial instruments. The fair value of derivative financial instruments is determined using forward exchange rates at the end of the reporting period with the resulting value discounted back to present value.

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments.

- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.
- Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

The carrying amount of the trade and other receivables classified as current is reasonable approximated at fair value. Unless the carrying amount of borrowings is not a reasonable approximation of the fair value, in which case information related to the fair value of the borrowings is presented in Note 16.

4. Critical accounting estimates and assumptions

The Company makes estimates and assumptions concerning the future. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities after the end of the reporting period are addressed below.

(1) Estimated impairment of goodwill

The Company tests annually whether goodwill has suffered any impairment. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations (Note 14).

(2) Income taxes

The Company is operating in numerous countries and the income generated from these operations is subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain (Note 30).

(3) Provisions

The Company recognizes provisions for product warranties and sales return as of the reporting date as described in Note 17. The amounts are estimated based on historical data.

(4) Net defined benefit liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (Note 18).

5. Financial instruments by category

Categorizations of financial instruments are as follows:

(in millions of Korean won)	December 31, 2013		
Financial assets	**Loans and receivables**	**Assets classified as available-for-sale**	**Total**
Cash and cash equivalents	1,399,054	-	1,399,054
Trade receivables	3,220,504	-	3,220,504
Other receivables	640,998	-	640,998
Other non-current receivables	25,026	-	25,026
Other non-current financial assets	-	5,952	5,952
Total	5,285,582	5,952	5,291,534

(in millions of Korean won)	December 31, 2013		
Financial liabilities	**Hedging derivatives**	**Liabilities at amortized cost**	**Total**
Trade payables	-	1,268,291	1,268,291
Other payables	-	838,021	838,021
Borrowings (current)	-	2,206,848	2,206,848
Other current liabilities (dividends payable)	-	1,071	1,071
Other non-current payables	-	76,346	76,346
Borrowings (non-current)	-	803,634	803,634
Total	-	5,194,211	5,194,211

(in millions of Korean won)	December 31, 2012			
Financial assets	**Loans and receivables**	**Assets at fair value through profit or loss**	**Assets classified as available-for-sale**	**Total**
Cash and cash equivalents	720,767	-	-	720,767
Trade receivables	3,131,051	-	-	3,131,051
Other receivables	772,746	-	-	772,746
Other current financial assets	-	2,352	-	2,352
Other non-current receivables	20,718	-	-	20,718
Other non-current financial assets	-	-	21,811	21,811
Total	4,645,282	2,352	21,811	4,669,445

(in millions of Korean won)	December 31, 2012		
Financial liabilities	**Hedging derivatives**	**Liabilities at amortized cost**	**Total**
Trade payables	-	1,522,395	1,522,395
Other payables	-	766,231	766,231
Borrowings (current)	-	1,751,781	1,751,781
Other financial liabilities	154	-	154
Other current liabilities (dividends payable)	-	1,115	1,115
Other non-current payables	-	15,070	15,070
Borrowings (non-current)	-	1,195,126	1,195,126
Total	154	5,251,718	5,251,872

Net gains (losses) on financial instruments by category are as follows:

(in millions of Korean won)	**2013**	**2012**
Assets at fair value through profit or loss		
Gain(loss) on valuation/ disposal	(1,841)	7,470
Hedging derivatives		
Gain on valuation recognized in other comprehensive expenses	154	527
Interest expense	(179)	(740)
Assets classified as available-for-sale		
Dividend income	190	157
Loans and receivables		
Interest income	35,733	30,099
Loss(gain) on foreign currency translation	(12,504)	(31,440)
Loss(gain) on foreign exchange	(62,725)	(129,223)
Liabilities at amortized cost		
Interest expense	(92,588)	(102,517)
Gain on foreign currency translation	30,552	41,159
Gain on foreign exchange	48,014	114,331

6. Cash and cash equivalents

Details of cash and cash equivalents are as follows:

(in millions of Korean won)	**December 31, 2013**	**December 31, 2012**
Bank deposits and cash on hand	341,854	282,039
Financial deposits, others	1,057,200	438,728
Total	1,399,054	720,767

As of December 31, 2013, other non-current receivables amounting to ₩24 million are restricted from withdrawal in connection with maintaining checking accounts (2012: ₩38 million). As of December 31, 2013, cash and cash equivalents include deposits with banks of ₩4,167 million held by a subsidiary which are not freely remissible to the Parent Company because of currency exchange restrictions (2012: ₩4,079 million).

7. Trade and other receivables

Trade and other receivables, net of allowance for doubtful accounts, are as follows:

(in millions of Korean won)	**December 31, 2013**			**December 31, 2012**		
	Original amount	**Less: allowance for doubtful accounts**	**Carrying amount**	**Original amount**	**Less: allowance for doubtful accounts**	**Carrying amount**
Trade receivables[1]	3,235,455	(14,951)	3,220,504	3,141,161	(10,110)	3,131,051
Other current receivables	640,998	-	640,998	772,746	-	772,746
Other non-current receivables	25,026	-	25,026	20,718	-	20,718
Total	3,901,479	(14,951)	3,886,528	3,934,625	(10,110)	3,924,515

[1] As of December 31, 2013, trade receivables transferred to financial institutions but not fully derecognized are as follows (Note 16):

(in millions of Korean won)	**Loans and receivables (trade receivables collateralized borrowings)**	
	December 31, 2013	**December 31, 2012**
Carrying amount of transferred assets	934,724	994,295
Carrying amount of related liabilities	(934,724)	(994,295)

Details of other receivables are as follows:

(in millions of Korean won)	December 31, 2013	December 31, 2012
Current		
Non-trade receivables	84,856	99,107
Financial deposits	528,926	642,616
Accrued income	3,930	7,664
Deposits	23,286	23,359
	640,998	772,746
Non-current		
Financial deposits	24	38
Loans	298	150
Deposits	24,704	20,530
	25,026	20,718
Total	666,024	793,464

The aging analysis of these trade and other receivables is as follows:

(in millions of Korean won)	December 31, 2013		December 31, 2012	
	Trade receivables	Other receivables	Trade receivables	Other receivables
Receivables not past due	2,988,575	644,446	2,879,061	787,580
Past due but not impaired	241,309	21,578	256,772	5,884
Up to 3 months	232,631	18,729	239,804	4,973
3 to 6 months	5,178	1,032	13,673	432
Over 6 months	3,500	1,817	3,295	479
Impaired receivables	5,571	-	5,328	-
	3,235,455	666,024	3,141,161	793,464

The movements in bad debt allowance for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	December 31, 2013				December 31, 2012			
	Trade receivables		Other receivables		Trade receivables		Other receivables	
	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current
Beginning balance	10,110	-	-	-	5,072	-	-	-
Additions	6,453	-	-	-	6,147	-	-	-
Write-off	(868)	-	-	-	(826)	-	-	-
Exchange differences	(744)	-	-	-	(283)	-	-	-
Ending balance	14,951	-	-	-	10,110	-	-	-

The carrying amounts of trade and other receivables approximate their fair values.

8. Other financial assets and liabilities

Details of other financial assets and liabilities are as follows:

(in millions of Korean won)	December 31, 2013	December 31, 2012
Other financial assets		
Derivatives (Note 10)	-	2,352
Available-for-sale (Note 9)	5,952	21,811
Less: current portion	-	(2,352)
Total	5,952	21,811
Other financial liabilities		
Derivatives (Note 10)	-	154
Less: current portion	-	(154)
Total	-	-

9. Financial assets classified as available-for-sale

The movements in financial assets classified as available-for-sale for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	December 31, 2013	December 31, 2012
Beginning balance	21,811	5,973
Exchange differences	(9)	(12)
Additions	-	15,850
Transfer[1]	(15,850)	-
Ending balance	5,952	21,811

In 2013, the investment into LG Fuel Cell Systems Inc. was reclassified from available for-sale financial assets to investment in associates as the Parent Company can exercise significant influence as the executive of the Parent Company is a member of the board of directors of LG Fuel Cell Systems Inc. (Note 12).

Financial assets classified as available-for-sale consist of unlisted equity securities.
The unlisted equity securities are measured at cost as the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed.

No impairment losses were recognized for financial assets classified as available-for-sale during the years ended December 31, 2013 and 2012.

10. Derivative financial instruments

Details of derivative financial assets and liabilities are as follows:

(in millions of Korean won)	December 31, 2013		December 31, 2012	
	Assets	Liabilities	Assets	Liabilities
Current				
Cash flow hedges	-	-	-	154
Held-for-trading	-	-	2,352	-
	-	-	2,352	154

There are no derivative financial contracts as of December 31, 2013. Details of derivative financial contracts as of December 31, 2012, are as follows:

	December 31, 2012				
Classification	**Contractor**	**Contract date**	**Contract amount (in thousands)**	**Contract period**	**Contract terms**
Forward exchange	BOA and 13 other banks	2013.10.10, others	US$ 10,000, others	2013.01.03 ~ 2013.02.22, etc	₩ 1119.32, US$, others
Interest rate swap	HSBC	2006.10.11	₩ 3,000,000	2006.10.11 ~ 2013.09.05	Received: 3 month CD, Paid: 4.61%
	HSBC	2007.06.15	US$ 4,500	2007.06.15 ~ 2013.09.05	Received: 3 month Libor Paid: 5.59%

Trading derivative financial instrument is classified as a current asset or liability. Hedging derivative financial instrument is classified as a non-current asset or liability if the remaining maturity of the hedged item is more than 12 months and, as a current asset or liability, if the remaining maturity of the hedged item is less than 12 months.

There was no ineffective portion of cash flow hedges.

11. Inventories

Details of inventories are as follows:

(in millions of Korean won)	December 31, 2013			December 31, 2012		
	Original amount	Valuation allowance	Carrying amount	Original amount	Valuation allowance	Carrying amount
Merchandise	67,723	(952)	66,771	87,584	(917)	86,667
Finished products	1,160,004	(40,127)	1,119,877	1,136,794	(20,168)	1,116,626
Semi-finished products	372,872	-	372,872	298,794	-	298,794
Work-in-process	1,151	-	1,151	363	-	363
Raw materials	708,986	(2,203)	706,783	762,954	(1,300)	761,654
Supplies	90,193	-	90,193	78,517	-	78,517
Materials-in-transit	206,384	-	206,384	285,309	-	285,309
Total	2,607,313	(43,282)	2,564,031	2,650,315	(22,385)	2,627,930

The cost of inventories recognized as expense and included in 'cost of sales' amounted to ₩ 16,445,699 million (2012: ₩16,688,614 million).

12. Investments in associates and joint ventures

Changes in the carrying amount of investments in associates and joint ventures for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	December 31, 2013						
	Beginning balance	Acquisitions /transfer	Dividends	Share of profit(loss) of associates	Share of other comprehensive income(expense) of associates	Others	Ending balance
LG Vina chemical Co., Ltd.	3,675	-	(1,276)	1,098	(24)	-	3,473
HL Greenpower Co., Ltd.	15,557	-	-	1,193	-	(4)	16,746
LG Holdings (HK) Ltd.	60,012	-	-	2,931	502	-	63,445
TECWIN Co., Ltd.	5,408	-	(35)	582	-	-	5,955
SEETEC Co., Ltd.	155,042	-	-	9,736	-	(43)	164,735
LG Chem Brasil INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	258	321	-	-	-	-	579
CNOOC & LG Petrochemicals Co., Ltd.	39,244	-	-	(1,027)	528	-	38,745
KLPE Limited Liability Partnership[1]	125,872	18,680	-	(1,363)	(3,415)	-	139,774
LG Fuel Cell Systems Inc.[2]	-	22,269	-	(7,762)	(98)	6	14,415
Total	405,068	41,270	(1,311)	5,388	(2,507)	(41)	447,867

(in millions of Korean won)	December 31, 2012						
	Beginning balance	Acquisitions /disposal	Dividends	Share of profit(loss) of associates	Share of other comprehensive income(expense) of associates	Others	Ending balance
LG Vina chemical Co., Ltd.	3,911	-	(1,373)	1,434	(297)	-	3,675
HL Greenpower Co., Ltd.	14,250	-	-	1,289	-	18	15,557
LG Holdings (HK) Ltd.	61,459	-	-	2,198	(3,645)	-	60,012
TECWIN Co., Ltd.	4,570	13	(33)	858	-	-	5,408
SEETEC Co., Ltd.	147,423	-	-	7,712	-	(93)	155,042
LG Chem Brasil INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	258	-	-	-	-	-	258
LG Yongxing International Trading Co., Ltd.	82	(82)	-	-	-	-	-
CNOOC & LG Petrochemicals Co., Ltd.	40,969	-	-	(175)	(1,550)	-	39,244
KLPE Limited Liability Partnership	55,486	75,565	-	(896)	(4,283)	-	125,872
Total	328,408	75,496	(1,406)	12,420	(9,775)	(75)	405,068

[1] During the year, the Company acquired additional shares of KLPE Limited Liability Partnership for ₩18,680 million. The Company has recognized ₩10,388 million as other payables as of December 31, 2013, for the unpaid consideration in the acquisition of KLPE Limited Liability Partnership.

[2] In 2013, investment into LG Fuel Cell Systems Inc. was reclassified from available for-sale financial assets to investment in associates as the Parent Company can exercise significant influence as the executive of the Parent Company is a member of the board of directors of LG Fuel Cell Systems Inc. In addition, LG Fuel Cell Systems Inc. issued new shares with disproportionate rights during the year and the Parent Company acquired additional shares for ₩6,419 million. As a result, the Parent Company's percentage of ownership increased to 18% (Note 9).

13. Property, plant and equipment

Changes in the carrying amounts of property, plant and equipment for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	December 31, 2013										
	Land	**Buildings**	**Structures**	**Machinery**	**Vehicles**	**Tools**	**Equipment**	**Others**	**Construction -in-progress**	**Machinery-in-transit**	**Total**
Beginning balance	712,238	1,647,499	485,908	3,504,325	10,249	249,746	89,504	88,294	1,340,170	220,245	8,348,178
Cost	712,238	1,981,069	814,135	8,819,666	38,873	570,364	230,923	197,705	1,374,966	220,245	14,960,184
Accumulated depreciation	-	(333,565)	(327,929)	(5,306,272)	(28,624)	(316,586)	(141,309)	(109,411)	-	-	(6,563,696)
Accumulated impairment	-	(5)	(298)	(9,069)	-	(4,032)	(110)	-	(34,796)	-	(48,310)
Acquisitions/ Transfer	101,028	300,111	126,162	1,321,344	3,267	114,160	30,173	35,184	1,241,315	141,012	3,413,756
Disposals/ Transfer	-	(450)	(2,016)	(12,850)	(951)	(10,551)	(904)	-	(1,881,596)	(206,713)	(2,116,031)
Exchange differences	(370)	(1,314)	591	152	(8)	(336)	(33)	-	10,117	-	8,799
Depreciation	-	(53,078)	(36,693)	(778,823)	(3,011)	(73,488)	(25,912)	(50,396)	-	-	(1,021,401)
Impairment	(68)	(9,811)	(1,614)	(37,207)	(108)	(3,075)	(1,067)	-	(20,742)	-	(73,692)
Ending balance	812,828	1,882,957	572,338	3,996,941	9,438	276,456	91,761	73,082	689,264	154,544	8,559,609
Cost	813,367	2,279,332	935,506	10,040,565	36,701	646,873	253,098	210,204	743,592	154,544	16,113,782
Accumulated depreciation	-	(386,539)	(361,532)	(6,005,703)	(27,161)	(363,365)	(160,238)	(137,122)	-	-	(7,441,660)
Accumulated impairment	(539)	(9,836)	(1,636)	(37,921)	(102)	(7,052)	(1,099)	-	(54,328)	-	(112,513)

(in millions of Korean won)	December 31, 2012										
	Land	**Buildings**	**Structures**	**Machinery**	**Vehicles**	**Tools**	**Equipment**	**Others**	**Construction -in-progress**	**Machinery-in-transit**	**Total**
Beginning balance	604,869	1,473,258	361,886	2,777,041	12,844	202,042	67,120	115,292	1,455,847	305,756	7,375,955
Cost	604,869	1,765,429	663,417	7,540,031	41,219	473,328	200,374	186,155	1,490,643	305,756	13,271,221
Accumulated depreciation	-	(292,165)	(301,524)	(4,753,396)	(28,375)	(267,254)	(133,153)	(70,863)	-	-	(5,846,730)
Accumulated impairment	-	(6)	(7)	(9,594)	-	(4,032)	(101)	-	(34,796)	-	(48,536)
Acquisitions/ Transfer	107,541	234,527	161,191	1,412,172	2,211	113,595	46,532	20,619	1,603,381	281,623	3,983,392
Disposals/ Transfer	(26)	(429)	(217)	(5,255)	(1,377)	(1,489)	(622)	(250)	(1,702,982)	(367,134)	(2,079,781)
Exchange differences	(146)	(13,965)	(4,003)	(36,250)	(54)	(1,581)	(957)	-	(16,076)	-	(73,032)
Depreciation	-	(45,892)	(30,984)	(643,301)	(3,375)	(62,795)	(22,540)	(47,367)	-	-	(856,254)
Impairment	-	-	(1,965)	(82)	-	(26)	(29)	-	-	-	(2,102)
Ending balance	712,238	1,647,499	485,908	3,504,325	10,249	249,746	89,504	88,294	1,340,170	220,245	8,348,178
Cost	712,238	1,981,069	814,135	8,819,666	38,873	570,364	230,923	197,705	1,374,966	220,245	14,960,184
Accumulated depreciation	-	(333,565)	(327,929)	(5,306,272)	(28,624)	(316,586)	(141,309)	(109,411)	-	-	(6,563,696)
Accumulated impairment	-	(5)	(298)	(9,069)	-	(4,032)	(110)	-	(34,796)	-	(48,310)

During the year ended December 31, 2013, the Company capitalized ₩27,528 million of borrowing costs (2012: ₩30,265 million) to property, plant and equipment.

The details of property, plant and equipment that have been pledged as collaterals for certain bank loan as of December 31, 2013, are as follows:

(in millions of Korean won)	December 31, 2013				
	Carrying amount	**Collateral value**	**Related account**	**Related amount**	**Mortgagee**
Land	3,294	3,844	Borrowings (Note 16)	1,620	Kookmin Bank
Building	9,539	4,943			

(in millions of Korean won)	December 31, 2012				
	Carrying amount	**Collateral value**	**Related account**	**Related amount**	**Mortgagee**
Land	3,294	3,844	Borrowings (Note 16)	1,669	Kookmin Bank
Building	9,813	4,943			

Depreciation of property, plant and equipment was classified as follows:

(in millions of Korean won)	**2013**	**2012**
Cost of sales	960,753	799,532
Selling, general and administrative expenses	60,465	54,980
Others[1]	183	1,742
Total	1,021,401	856,254

[1] Amounts capitalized to development costs are included.

The Company reviews annually whether there is any indication that an asset may be impaired.

The US battery division for vehicles, managed as a separate cash-generating unit (hereafter 'CGU') in battery business segments, has been tested for impairment due to delayed factory operations resulting from unexpected late orders from customers. The recoverable amount of the CGU is calculated on a basis of the value in use and mainly relate to machinery and equipment used in manufacturing.

The separator division, managed as a separate cash-generating unit (hereafter 'CGU') in Information & Electronic Materials segments, has been tested for impairment because the sales volume was lower than expected. The recoverable amount of the CGU is calculated on a basis of the value in use and mainly relate to machinery and equipment used in manufacturing.

During the year, the amount of impairment loss recognized as other non-operating expenses and key assumptions used for calculation of value in use are as follows:

(in millions of Korean won)	**US battery division for vehicles**	**Separator division**
Impaired amount		
Property, plant and equipment	25,878	46,363
Intangible assets	140	3,091
Key assumptions		
Pre-tax discount rate	13.8%	14.4%
Growth rate for subsequent years after five years	0%	0%

14. Intangible assets

Changes in the carrying amount of intangible assets for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	December 31, 2013					
	Development costs	Industrial property rights	Goodwill	Memberships	Others	Total
Beginning balance	42,410	78,610	33,415	51,692	27,766	233,893
Acquisitions/ Transfer	23,159	30,638	-	514	11,532	65,843
Disposals/ Transfer	(9,022)	(22)	-	(362)	(61)	(9,467)
Exchange differences	(33)	1	-	(5)	107	70
Amortization	(11,035)	(5,785)	-	-	(7,195)	(24,015)
Impairment	(248)	(2,672)	-	(134)	(177)	(3,231)
Ending balance	45,231	100,770	33,415	51,705	31,972	263,093

(in millions of Korean won)	December 31, 2012					
	Development costs	Industrial property rights	Goodwill	Memberships	Others	Total
Beginning balance	34,018	61,856	33,415	51,110	26,773	207,172
Acquisitions/ Transfer	24,445	21,040	-	2,582	8,713	56,780
Disposals/ Transfer	(6,825)	(854)	-	(1,968)	(699)	(10,346)
Exchange differences	(70)	-	-	(32)	(585)	(687)
Amortization	(9,158)	(3,432)	-	-	(6,436)	(19,026)
Ending balance	42,410	78,610	33,415	51,692	27,766	233,893

Amortization of intangible assets was classified as follows:

(in millions of Korean won)	2013	2012
Cost of sales	7,939	6,221
Selling, general and administrative expenses	16,076	12,805
Total	24,015	19,026

Impairment tests for goodwill

Goodwill is allocated to the Company's cash-generating units (CGUs) identified according to operating segment. The carrying amounts of allocated goodwill by CGUs are as follows:

(in millions of Korean won)

CGUs	Carrying amount
Goodwill arising on the acquisition of LG Petrochemical Co., Ltd.	
NCC	2,468
ABS	927
PO	900
PVC	755
Acrylic	682
Plasticizer	587
BPA	518
Others	1,356
	8,193
Goodwill arising on the acquisition of SAP business	
Acrylic	25,222
	25,222
Total	33,415

The recoverable amounts of CGUs have been determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a four-year period. Cash flows beyond the four-year period are estimated using 0% of expected growth rate.

Management determined pre-tax cash flow based on past performance and its expectations of market development. The discount rate used is pre-tax and reflect specific risks relating to the relevant operating segments. Discount rate used for value-in-use calculations for the current year is 11.7%. The recoverable amounts based on value-in-use calculations exceeded carrying amounts and accordingly, no impairments were recognized for the year ended December 31, 2013.

15. Other current and non-current assets

Details of other current and non-current assets are as follows:

(in millions of Korean won)	December 31, 2013	December 31, 2012
Current		
Prepayments to suppliers	24,970	48,552
Prepaid expenses	23,619	21,353
Prepaid value added tax	92,310	69,449
Others	63,960	51,424
Total	204,859	190,778
Non-current		
Long-term prepaid expenses	36,133	40,997
Other investment assets	98	25
Total	36,231	41,022

16. Borrowings

The carrying amount of borrowings are as follows:

(in millions of Korean won)	December 31, 2013	December 31, 2012
Current		
Short-term borrowings	1,719,658	1,666,662
Current maturities of bank loans	284,392	82,959
Current maturities of debentures	199,724	-
Current maturities of finance lease liabilities	3,074	2,160
	2,206,848	1,751,781
Non-current		
Bank loans	404,654	594,018
Debentures	398,980	598,034
Finance lease liabilities	-	3,074
	803,634	1,195,126
Total	3,010,482	2,946,907

Details of current borrowings are as follows:

(in millions of Korean won)	Bank	Latest maturity date	Annual interest rate (%) at December 31, 2013	Carrying Amount December 31, 2013	Carrying Amount December 31, 2012
Notes discounted[1]	Woori Bank, others	2014.06.27	3Libor+1.00, various	934,724	994,295
Bank loans	Hangseng Bank, others	2014.12.22	Libor+0.50~2.50, various	784,934	672,367
Total				1,719,658	1,666,662

[1] As of December 31, 2013, trade receivables transferred to financial institutions but not

derecognized are accounted for as collateralized borrowing transaction (Note 7).

Details of non-current borrowings are as follows:

(in millions of Korean won)	December 31, 2013					
	Bank	**Annual interest rate (%)**	**Latest maturity date**	**Total amount**	**Current maturities**	**Long-term debts**
Won currency borrowings	Kookmin Bank	2.70	2018.07.14	786	75	711
	Kookmin Bank	2.70	2020.03.21	834	47	787
	Korea Development Bank	3.53	2015.07.19	200,000	-	200,000
Foreign currency borrowings	Shanghai Pudong Development Bank	5.76	2015.09.15	1,742	-	1,742
	Sumitomo Mitsui Banking Corporation	3Libor + 0.85	2014.07.29	21,106	21,106	-
	Standard Chartered Bank	3Libor + 2.20	2015.12.14	19,105	4,246	14,859
	Standard Chartered Bank	3Libor + 2.20	2016.09.25	10,614	1,061	9,553
	Agricultural Bank of China	5.90	2015.10.15	9,574	-	9,574
	China Merchants Bank	5.76	2015.05.17	2,611	-	2,611
	ANZ Bank	3Libor + 2.10	2014.07.07	15,921	15,921	-
	Bank of America	2.00	2014.07.03	21,228	21,228	-
	Bank of America	2.00	2014.08.08	6,023	6,023	-
	Bank of America	6Libor + 1.50	2014.10.24	31,842	31,842	-
	Bank of America	3Libor + 1.68	2014.08.29	42,457	42,457	-
	BTMU	3Libor + 1.54	2015.07.20	52,765	-	52,765
	BTMU	3Libor + 2.00	2016.05.13	18,044	6,368	11,676
	HSBC	3Libor + 0.75	2014.09.19	42,456	42,456	-
	HSBC	3Libor + 2.25	2015.05.25	21,228	-	21,228
	JP Morgan	3Libor + 1.75	2014.07.17	21,222	21,222	-
	JP Morgan	3Libor + 1.30	2016.11.16	26,383	-	26,383
	Mizuho Banking Corporation	3Libor + 0.65	2014.05.31	63,318	63,318	-
	Nordea Bank	1Wibor + 1.00	2014.06.30	7,022	7,022	-
	Nova Scotia Bank	3Libor + 1.54	2015.07.20	52,765	-	52,765
Total				689,046	284,392	404,654

(in millions of Korean won)	December 31, 2012					
	Bank	**Annual interest rate (%)**	**Latest maturity date**	**Total amount**	**Current maturities**	**Long-term debts**
Won currency borrowings	Kookmin Bank	3.00	2018.07.14	819	122	697
	Kookmin Bank	3.00	2020.03.21	850	90	760
	Korea Development Bank	3.53	2015.07.19	200,000	-	200,000
	BTMU	3CD + 0.60	2013.09.05	7,500	7,500	-
Foreign currency borrowings	Shanghai Pudong Development Bank	5.76	2015.09.15	3,008	-	3,008
	Sumitomo Mitsui Banking Corporation	3Libor + 0.60	2013.09.05	4,820	4,820	-
	Sumitomo Mitsui Banking Corporation	3Libor + 0.85	2014.07.29	21,422	-	21,422
	Standard Chartered Bank	4.50	2013.06.10	21,607	21,607	-
	Standard Chartered Bank	3Libor + 2.20	2015.12.15	10,804	-	10,804
	Agricultural Bank of China	5.90	2015.10.15	17,180	-	17,180
	China Minsheng Bank	6Libor + 3.30	2013.01.15	1,200	1,200	-
	China Merchants Bank	6.21	2015.05.17	5,156	-	5,156
	ANZ Bank	3Libor + 2.10	2013.07.07	16,205	8,102	8,103
	ANZ Bank	3Libor + 2.10	2014.07.07	16,205	8,103	8,102
	ANZ Bank	3Libor + 2.80	2013.04.12	4,822	4,822	-
	ANZ Bank	3Libor + 2.80	2013.10.11	4,822	4,822	-
	Bank of America	6Libor + 1.50	2014.10.24	32,411	-	32,411
	Bank of America	3Libor + 1.68	2014.08.29	43,214	-	43,214
	BTMU	6Libor + 2.60	2013.04.26	8,103	8,103	-
	BTMU	6Libor + 2.10	2013.06.21	8,103	8,103	-
	BTMU	3Libor + 1.54	2015.07.20	53,555	-	53,555
	HSBC	3Libor + 0.60	2013.09.05	2,410	2,410	-
	HSBC	3Libor + 0.75	2014.09.19	43,214	-	43,214
	HSBC	3Libor + 2.25	2015.05.25	21,607	-	21,607
	Mizuho Banking Corporation	3Libor + 0.60	2013.09.05	3,213	3,213	-
	Mizuho Banking Corporation	3Libor + 0.65	2014.05.31	64,266	-	64,266
	Nordea Bank	1Wibor + 1.00	2014.06.30	6,964	-	6,964
	Nova Scotia Bank	3Libor + 1.54	2015.07.20	53,555	-	53,555
	Less: discount on borrowings			(58)	(58)	-
Total				676,977	82,959	594,018

Certain property, plant and equipment have been pledged as collaterals for the above non-current borrowings (Note 13).

Details of debentures are as follows:

(in millions of Korean won)

	December 31, 2013					
	Financial institution	**Annual interest rate (%)**	**Latest maturity date**	**Total amount**	**Current maturities**	**Long-term debts**
Won currency debentures	Woori Security	3.83	2014.12.05	200,000	200,000	-
	Woori Security	4.03	2016.12.05	100,000	-	100,000
	Woori Security	3.96	2015.03.29	100,000	-	100,000
	Woori Security	4.11	2017.03.29	200,000	-	200,000
	Less: discount on debentures			(1,296)	(276)	(1,020)
Total				598,704	199,724	398,980

(in millions of Korean won)

	December 31, 2012					
	Financial institution	**Annual interest rate (%)**	**Latest maturity date**	**Total amount**	**Current maturities**	**Long-term debts**
Won currency debentures	Woori Security	3.83	2014.12.05	200,000	-	200,000
	Woori Security	4.03	2016.12.05	100,000	-	100,000
	Woori Security	3.96	2015.03.29	100,000	-	100,000
	Woori Security	4.11	2017.03.29	200,000	-	200,000
	Less: discount on debentures			(1,966)	-	(1,966)
Total				598,034	-	598,034

Details of finance lease liabilities are as follows:

(in millions of Korean won) **December 31, 2013**

Bank	**Annual interest rate (%)**	**Latest maturity date**	**Total amount**	**Current maturities**	**Long-term debts**
Hyundai Oil Bank	9.00	2014.10.29	3,074	3,074	-

(in millions of Korean won) **December 31, 2012**

Bank	**Annual interest rate (%)**	**Latest maturity date**	**Total amount**	**Current maturities**	**Long-term debts**
Hyundai Oil Bank	9.00	2014.10.29	5,234	2,160	3,074

The finance lease liabilities are liabilities associated with sales and leaseback arrangements of property, plant and equipment of the MTBE factory.

Lease liabilities are effectively secured as the rights to the leased assets revert to the lessor in the event of default.

Carrying amounts and fair values of non-current borrowings are as follows:

(in millions of Korean won)	**December 31, 2013**		**December 31, 2012**	
	Carrying amount	**Fair value[1]**	**Carrying amount**	**Fair value[1]**
Bank loans	404,654	401,029	594,018	590,654
Debentures	398,980	392,854	598,034	616,213
Finance lease liabilities	-	-	3,074	3,031
Total	803,634	793,883	1,195,126	1,209,898

[1] Fair values are based on cash flows discounted using Korean won currency note yield in the same credit grade with the Company(AA+), and borrowing rate quoted by People's Bank of China and others.

The present value of finance lease liabilities is as follows:

(in millions of Korean won)	**December 31, 2013**			**December 31, 2012**		
	Minimum lease payments	**Future finance costs**	**Present value**	**Minimum lease payments**	**Future finance costs**	**Present value**
Within 1 year	3,195	121	3,074	2,481	321	2,160
1 to 5 years	-	-	-	3,195	121	3,074

17. Provisions

Changes in the carrying amount of provisions for the years ended December 31, 2013, and 2012, are as follows:

(in millions of Korean won)	**December 31, 2013**		
	Sales returns [1]	**Warranty [2]**	**Total**
Beginning balance	1,623	11,583	13,206
Additions	24,219	7,053	31,272
Used amount	(24,310)	(642)	(24,952)
Ending balance	1,532	17,994	19,526
Less : current portion	(1,532)	(513)	(2,045)
Total	-	17,481	17,481

(in millions of Korean won)	**December 31, 2012**		
	Sales returns [1]	**Warranty [2]**	**Total**
Beginning balance	2,800	6,743	9,543
Additions	6,648	9,394	16,042
Used amount	(7,825)	(509)	(8,334)
Reversals	-	(4,045)	(4,045)
Ending balance	1,623	11,583	13,206
Less : current portion	(1,623)	(320)	(1,943)
Total	-	11,263	11,263

[1] Sales return provisions have been accrued for the estimated sales return determined based on historical experience.
[2] Warranty provisions have been accrued for the estimated warranty service costs to be incurred based on the terms of warranty and historical experience. Further, the Company purchased insurance policies to meet such obligations.

18. Net Defined benefit liability

The amounts recognized in the statements of financial position are as follows:

(in millions of Korean won)	**December 31, 2013**	**December 31, 2012**
Present value of obligations[1]	438,122	367,567
Fair value of plan assets	(386,211)	(261,666)
Liability in the statement of financial position	51,911	105,901

[1] The present value of retirement benefit obligations is net of existing contributions to the National Pension Plan of ₩883 million as of December 31, 2013 (2012: ₩945 million).

The amounts recognized in the statements of income for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	**2013**	**2012**
Current service cost[1]	75,037	51,746
Interest cost	13,307	12,093
Expected return on plan assets	(9,441)	(7,475)
Total, included in employee benefit expenses	78,903	56,364

[1] The above amounts excluded ₩535 million (2012: ₩1,224 million) of expenses capitalized to construction in progress and development costs.

Severance costs recognized for defined contribution plan for the year ended December 31, 2013, amounted to ₩1,263 million (2012: ₩951 million).

The amounts recognized in the statement of income for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	**2013**	**2012**
Cost of sales	55,643	38,603
Selling, general and administrative expenses	24,523	18,712
Total	80,166	57,315

Changes in the present value of defined benefit obligations for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	2013	2012
Beginning balance	367,567	253,396
Transfer in	(679)	2,019
Current service cost	75,572	52,970
Interest expense	13,307	12,093
Remeasurements:		
Actuarial gains and losses arising from changes in demographic assumptions	(3,562)	13,616
Actuarial gains and losses arising from changes in financial assumptions	(16,595)	2,071
Actuarial gains and losses arising from experience adjustments	22,588	46,370
Others	21	247
Exchange differences	(92)	335
Payments from plans:	(20,005)	(15,550)
Ending balance	438,122	367,567

Changes in the fair value of plan assets for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	2013	2012
Beginning balance	261,666	192,619
Transfer in	26	-
Interest income	9,441	7,475
Remeasurements:		
Return on plan assets (excluding amounts included in interest income)	(1,138)	67
Contributions:		
Employers	130,000	70,000
Payments from plans	(13,176)	(8,495)
Administrative costs	(608)	-
Ending balance	386,211	261,666

The actual return on plan assets for the year ended December 31, 2013, was ₩8,303 million (2012: ₩7,542 million).

The principal actuarial assumptions used are as follows:

	December 31, 2013	December 31, 2012
Discount rate	4.1%	3.7%
Future salary increase	5.1%	5.1%

The sensitivity analysis for changes in key actuarial assumptions is as follows:

(in millions of Korean won)	**Increase by 1%**	**Decrease by 1%**
Discount rate:		
Increase(decrease) in defined benefit obligations	(40,704)	48,045
Future salary increase		
Increase(decrease) in defined benefit obligations	47,118	(40,743)

A decrease in corporate bond yields may lead most significantly to an increase in defined benefit liabilities.

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The sensitivity of the defined benefit obligation to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit obligations recognized on the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous period.

Plan assets consist of:

(in millions of Korean won)	**December 31, 2013**				**December 31, 2012**			
	Quoted price	**Unquoted price**	**Total**	**Compo-sition**	**Quoted price**	**Unquoted price**	**Total**	**Compo-sition**
Insurance contracts with guaranteed yield	386,211	-	386,211	100%	261,666	-	261,666	100%

19. Other current liabilities

Other current liabilities consist of:

(in millions of Korean won)	**December 31, 2013**	**December 31, 2012**
Advances from customers	24,844	37,457
Dividends payable	1,071	1,115
Withholding	41,383	44,968
Unearned revenues	19,528	12,248
Others	60,900	56,819
Total	147,726	152,607

20. Commitments and contingencies

(1) The Parent Company and the newly established company, LG Hausys Ltd., are jointly liable for the obligations outstanding as of April 1, 2009, the spin-off date.

(2) As of December 31, 2013 and 2012, the Parent Company has been provided with guarantees from the Seoul Guarantee Insurance for the execution of supply contracts.

(3) As of December 31, 2013, the Parent Company has provided one blank promissory note to the Korea National Oil Corporation as collateral in relation to petroleum import surcharges.

(4) As of December 31, 2013, the Parent Company and certain overseas subsidiaries have various specific line of credit agreements with several financial institutions, as follows: The Company also entered into credit line agreements with other financial institutions relating to trade finance and import/export amounting to ₩220,000 million and US$ 525 million.

(*unit: Korean won in millions, foreign currencies in millions*)

Classification	The Company		Certain Overseas Subsidiaries				
	KRW	USD	USD	CNY	EUR	INR	PLN
Limit of bank overdraft	64,000	50	125	510	30	685	32
Limit of the letter of credit	64,000	207	180	-	-	675	-
Limit of discount of notes from export	-	1,459	-	-	-	-	-
Limit of guaranteed payments in other foreign currency	-	85	-	-	-	-	-
Limit of loan arrangements	-	-	1,174	3,750	3	1,895	20

(5) As of December 31, 2013, the Parent Company has B2B purchase arrangements with several financial institutions amount to ₩300,000 million.

(6) As of December 31, 2013, the Parent Company and certain overseas subsidiaries have been named as a plaintiff in six and 31 legal actions involving ₩1,161 million and ₩2,675 million in claims, respectively, and as a defendant in seven and two legal actions with ₩2,439 million and ₩148 million in claims, respectively. The ultimate outcome of these cases cannot be determined at the reporting date.

(7) As of December 31, 2013, the consumers in U.S and Canada have filed a class actions against the Parent Company and certain overseas subsidiaries in relation to price fixing of small secondary batteries. However, the ultimate outcome of these cases cannot be determined at the reporting date.

(8) As of December 31, 2013, the Parent Company has technology license agreements with STYRON EUROPE GmbH and other companies for the production of Polycarbonate products. Further, the Company has entered into manufacture and production technical contracts with Exxon Mobile and others.

(9) The Parent Company has entered into a license agreement with LG Corp. to use trademarks on the products that the Company manufactures and sells, and on the services the Company provides in relation to its business.

(10) As of December 31, 2013, the Parent Company has a long-term purchase contract for certain raw materials and the supplier has made US$ 126 million and US$ 60 million of credit

guarantee contract with financial institutions. Further, as of December 31, 2013, the Parent Company has a contract of US$ 10 million guarantees with financial institutions in regard to a delivery commitment for certain products and the Company has a contract of US$ 90 million guarantees with financial institutions for advances received from customers.

(11) As of December 31, 2013, the Parent Company has guaranteed the repayment of various obligations of its subsidiaries and associates. The outstanding balance of such guarantees as of December 31, 2013, amounts to US$ 215 million, EUR 3 million and PLN 52 million (total equivalent to ₩250,066 million) (2012: US$ 235 million, EUR 3 million and PLN 52 million, total equivalent to ₩274,898 million). Details of guarantees provided as of December 31, 2013 and 2012, are as follows:

(in millions of Korean won)

Guarantor	Guarantee beneficiary	Guarantee period	Financial institution	December 31, 2013 Amount of guarantee	December 31, 2013 Outstanding loan amount
The Parent Company	LG Chem (Nanjing) Information & Electronics Materials Co., Ltd.	2011.08.29 ~ 2015.06.17	HSBC	63,684	63,684
	〃	2011.10.24 ~ 2014.10.31	Bank of America	31,842	31,842
	LG Chem Poland Sp. z o.o.	2009.08.26 ~ 2014.06.30	Nordea Bank	18,258	8,206
	LG Chem Europe GmbH	2013.01.02 ~ 2014.01.02	Shinhan Bank	4,369	-
	LG Chem Michigan, Inc.	2010.11.19 ~ 2013.11.18	Bank of America	-	-
	〃	2011.04.07 ~ 2014.05.31	Mizuho Bank	63,318	63,318
	〃	2011.04.07 ~ 2014.04.07	Sumitomo Mitsui bank	21,106	21,106
	〃	2013.06.29 ~ 2016.11.16	JP Morgan	47,489	47,489
	Total			250,066	235,645

(in millions of Korean won)

Guarantor	Guarantee beneficiary	Guarantee period	Financial institution	December 31, 2012 Amount of guarantee	December 31, 2012 Outstanding loan amount
The Parent Company	LG Chem (Nanjing) Information & Electronics Materials Co., Ltd.	2011.08.29 ~ 2015.06.17	HSBC	64,821	64,821
	〃	2011.10.24 ~ 2014.10.31	Bank of America	32,411	32,411
	LG Chem Poland Sp. z o.o.	2009.08.26 ~ 2014.06.30	Nordea Bank	18,107	9,325
	LG Chem Europe GmbH	2013.01.02 ~ 2014.01.02	Shinhan Bank	4,249	-
	LG Chem Michigan, Inc.	2010.11.19 ~ 2013.11.18	Bank of America	26,778	26,778
	〃	2011.04.07 ~ 2014.05.31	Mizuho Bank	64,266	64,266
	〃	2011.04.07 ~ 2014.04.07	Sumitomo Mitsui bank	42,844	28,920
	〃	2013.06.29 ~ 2016.11.16	JP Morgan	21,422	-
	Total			274,898	226,521

(12) Capital expenditure contracted for as of the reporting date but not yet incurred is as follows:

(in millions of Korean won)	**December 31, 2013**	**December 31, 2012**
Property, plant and equipment	317,086	368,347

21. Equity

Changes in share capital and share premium are as follows:

(in millions of Korean won)	Ordinary shares		Preferred shares		
	Number of shares	Amount	Number of shares	Amount	Share premium
January 1, 2012	66,271,100	331,356	7,628,921	38,144	897,424
December 31, 2012	66,271,100	331,356	7,628,921	38,144	897,424
December 31, 2013	66,271,100	331,356	7,628,921	38,144	897,424

Changes in treasury shares are as follows:

	Number of shares			
(in millions of Korean won)	Ordinary shares	Preferred shares	Carrying amount	Gain on sale of treasury shares
January 1, 2012	359,784	5,519	15,484	13,855
Purchase of treasury shares	6	-	-	-
December 31, 2012	359,790	5,519	15,484	13,855
Purchase of treasury shares	2	-	-	-
December 31, 2013	359,792	5,519	15,484	13,855

The Company intends to sell its treasury shares in the near future.

22. Retained earnings

Details of retained earnings are as follows:

(in millions of Korean won)	December 31, 2013	December 31, 2012
Legal reserve [1]	275,601	260,113
Discretionary reserve [2]	8,200,700	7,107,800
Retained earnings before appropriation	1,696,331	1,836,790
Total	10,172,632	9,204,703

[1] The Commercial Code of the Republic of Korea requires the Company to appropriate an amount equal to a minimum of 10% of its cash dividends as a legal reserve until such reserve equals 50% of its paid-in capital. This reserve is not available for the payment of cash dividends, but may be transferred to common stock or used to reduce accumulated deficit, if any.

[2] Pursuant to the Special Tax Treatment Control Law, the Company is required to appropriate, as a reserve for business rationalization, a portion of retained earnings equal to tax reductions arising from investment and other tax credits. This reserve may be distributed as dividends after reversal.

23. Other components of equity

Details of other components of equity are as follows:

(in millions of Korean won)	**December 31, 2013**	**December 31, 2012**
Treasury shares (Note 21)	(15,484)	(15,484)
Capital transactions within the Company [1]	(215)	(215)
Total	(15,699)	(15,699)

[1] Included gain(loss) from transactions with non-controlling interests and other reserves of subsidiaries net of deferred taxes.

24. Selling, general and administrative expenses

Selling, general and administrative expenses for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	**2013**	**2012**
Wages and salaries	319,119	264,145
Pension costs (Note 18)	24,523	18,712
Welfare expense	75,903	68,832
Travel expense	35,526	29,641
Water & utilities	24,329	20,693
Packaging expense	6,704	4,783
Rental expense	92,924	91,932
Commission expense	215,038	186,763
Depreciation (Note 13)	60,465	54,980
Advertising expense	16,175	20,330
Freight expense	411,191	374,598
Training expense	12,607	12,250
Amortization (Note 14)	16,076	12,805
Sample expense	12,925	13,321
Others	242,390	223,835
Total	1,565,895	1,397,620

25. Expenses by nature

Expenses that are recorded by function as cost of sales and selling, general and administrative expenses in the statements of income for the years ended December 31, 2013 and 2012, consist of:

(in millions of Korean won)	**2013**	**2012**
Changes in inventories	(58,221)	60,472
Raw materials and consumables used	15,554,983	15,806,300
Purchase of merchandise	948,937	821,842
Employee benefit expense (Note 26)	1,180,419	984,353
Advertising expense	17,367	21,551
Transportation expense	440,400	401,676
Service fees	338,263	286,012
Depreciation, amortization and impairment	1,045,233	873,538
Operating lease payments	50,585	46,495
Other expenses	1,882,602	2,050,457
Total	21,400,568	21,352,696

26. Employee benefit expense

(in millions of Korean won)	**2013**	**2012**
Wages and salaries	997,032	838,078
Pension costs – Defined benefit plan (Note 18)	78,903	56,364
Pension costs – Defined contribution plan (Note 18)	1,263	951
Others	103,221	88,960
Total	1,180,419	984,353

27. Finance income and expense

Details of finance income and expense for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	**2013**	**2012**
Finance income		
Interest income [1]	35,733	30,099
Dividend income	190	157
Foreign exchange gain	140,369	41,268
Gain on foreign currency translation	23,539	15,828
Gain on settlement of trading derivatives	3,589	10,286
Gain on valuation of trading derivatives	-	2,352
Total	203,420	99,990
Financial expense		
Interest expense [2]	65,239	72,992
Foreign exchange loss	160,833	66,757
Loss on foreign exchange translations	5,052	9,021
Loss on settlement of trading derivatives	5,430	5,168
Total	236,554	153,938

[1] Details of interest income are as follows:

(in millions of Korean won)	**2013**	**2012**
Bank deposits	35,062	29,187
Other loans and receivables	671	912
Total	35,733	30,099

[2] Details of interest expense are as follows:

(in millions of Korean won)	**2013**	**2012**
Interest on bank overdraft and borrowings	52,278	61,593
Interest on finance lease liabilities	320	502
Interest on debentures	24,541	23,876
Other interest expenses	15,628	17,286
Capitalized interest for qualifying assets	(27,528)	(30,265)
Total	65,239	72,992

28. Other non-operating income

Details of other non-operating income for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	**2013**	**2012**
Foreign exchange gain	323,659	301,291
Gain on foreign currency translation	17,363	33,551
Gain on disposal of property, plant and equipment	1,275	4,967
Gain on disposal of intangible assets	21	64
Others	20,033	31,980
Total	362,351	371,853

29. Other non-operating expenses

Detail of other non-operating expense for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	**2013**	**2012**
Foreign exchange loss	317,906	290,694
Loss on foreign currency translation	17,802	30,639
Loss on disposal of property, plant and equipment	21,011	5,514
Loss on disposal of intangible assets	6,146	1,046
Impairment loss on property, plant and equipment	73,692	2,102
Impairment loss on intangible assets	3,231	-
Donations	21,400	24,326
Others	15,165	5,829
Total	476,353	360,150

30. Income and Defined Taxes

Details of income tax expense are as follows:

(in millions of Korean won)	**2013**	**2012**
Current tax on profit for the year	331,274	320,315
Adjustments in respect of prior years	(5,493)	(25,026)
Deferred tax - movement in temporary differences	21,187	70,000
Deferred tax – tax credit carryforwards	(17,153)	(6,197)
	329,815	359,091
Current tax charged directly to equity	868	15,062
Income tax expense	330,683	374,153

The income taxes charged directly to other comprehensive income during the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	2013	2012
Current tax		
Remeasurements on net defined benefit liabilities	868	15,062
Deferred tax		
Cash flow hedges	(37)	(128)
Currency translation differences	467	285
Others	99	42
Total	529	199

The movements in deferred tax assets (liabilities) for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	2013				
		Increase (decrease)			
	Beginning balance	Profit (loss) for the year	Other comprehensive income	Exchange differences	Ending balance
Defined benefit liability	72,831	16,410	-	-	89,241
Plan assets	(62,626)	(29,695)	-	-	(92,321)
Reserve for research and human resources development	(181,500)	(53,240)	-	-	(234,740)
Allowance for doubtful accounts	2,820	1,311	-	(340)	3,791
Property, plant and equipment	71,437	27,813	-	200	99,450
Investments in subsidiaries, associates and joint ventures[1]	(5,729)	(1,778)	-	(72)	(7,579)
Accrued income	(1,740)	617	-	-	(1,123)
Others	2,224	13,749	-	1,011	16,984
	(102,283)	(24,813)	-	799	(126,297)
Deferred tax charged directly to equity	(21)	-	529	(3)	505
Tax credit carryforwards	6,197	17,153	-	-	23,350
Tax loss carryforwards	3,206	3,626	-	(874)	5,958
Deferred income tax assets (liabilities)	(92,901)	(4,034)	529	(78)	(96,484)

(in millions of Korean won)	2012				
		Increase (decrease)			
	Beginning balance	Profit for the year	Other comprehensive income	Exchange differences	Ending balance
Defined benefit liability	46,139	26,692	-	-	72,831
Plan assets	(46,139)	(16,487)	-	-	(62,626)
Reserve for research and human resources development	(94,380)	(87,120)	-	-	(181,500)
Allowance for doubtful accounts	3,742	(871)	-	(51)	2,820
Property, plant and equipment	56,999	15,443	-	(1,005)	71,437
Investments in subsidiaries, associates and joint ventures[1]	(14,974)	9,245	-	-	(5,729)
Accrued income	(447)	(1,293)	-	-	(1,740)
Others	20,174	(18,106)	-	156	2,224
	(28,886)	(72,497)	-	(900)	(102,283)
Deferred tax charged directly to equity	(30)	-	199	(190)	(21)
Tax credit carryforwards	-	6,197	-	-	6,197
Tax loss carryforwards	803	2,497	-	(94)	3,206
Deferred income tax assets (liabilities)	(28,113)	(63,803)	199	(1,184)	(92,901)

[1] Deferred tax liabilities of ₩975 million (2012: ₩3,136 million) for the accumulated temporary differences of ₩139,121 million (2012: ₩147,916 million) relating to unremitted earnings of certain subsidiaries have not been recognized as such amounts are reinvested permanently.

The reconciliation between income tax expense and accounting profit is as follows:

(in millions of Korean won)	2013	2012
Profit before income tax	1,601,296	1,880,498
Tax calculated based on applicable tax rate[1]	377,594	453,143
Tax adjustments		
Income not subject to tax	(1,383)	(8)
Expenses not deductible for tax purposes	24,783	10,255
Unrecognized deferred income tax for temporary differences in the current year	7,354	(117)
Tax credit	(77,472)	(93,209)
Effect from change of tax rate	-	467
Others	(193)	3,622
Income tax expense	330,683	374,153
Effective tax rate(income tax expense/ profit before income tax)	20.65%	19.90%

[1] The weighted average applicable tax rate on profit before income tax for the year ended December 31, 2013, is 23.58% (2012: 24.09%).

Realization of the future tax benefits related to the deferred tax assets is dependent on many factors, including the Company's ability to generate taxable income within the period during which the temporary differences reverse, the outlook of the economic environment, and the overall future industry outlook. Management periodically considers these factors in reaching its conclusion. The

Company did not recognize deferred income tax assets of ₩29,228 million (2012: ₩21,138 million) for the tax loss carryforwards of ₩95,921 million (2012: ₩69,730 million).

31. Earnings per share

Basic earnings per share is calculated by dividing the profit attributable to owners of the Parent Company by the weighted average number of shares in issue excluding shares purchased by the Parent Company and held as treasury shares. As of the reporting date, the Parent Company has no potential ordinary shares. Preferred shares have a right to participate in the profits of the Parent Company. These participation rights have been considered in presenting the EPS for ordinary shares and preferred shares.

Basic earnings per share attributable to the owners of the Parent Company for the years ended December 31, 2013 and 2012, is computed as follows:

(in millions of Korean won, except per share)	**2013**	**2012**
Profit attributable to ordinary shares [1]	1,134,381	1,339,211
Weighted average number of ordinary shares outstanding [2]	65,911,310	65,911,316
Basic earnings per ordinary share *(in won)*	17,211	20,318

(in millions of Korean won)	**2013**	**2012**
Profit attributable to preferred shares[1]	131,587	155,276
Weighted average number of preferred shares outstanding[2]	7,623,402	7,623,402
Basic earnings per preferred share *(in won)*	17,261	20,368

[1] Profit attributable to ordinary and preferred shares are as follows:

(in millions of Korean won)	**2013**	**2012**
Profit for the year attributable to owners of the Parent Company	1,265,968	1,494,487
Ordinary shares dividends (A)	263,645	263,645
Preferred shares dividends (B)	30,875	30,875
Undistributed earnings for the year	971,448	1,199,967
Undistributed earnings available for ordinary shares (C)	870,736	1,075,566
Undistributed earnings available for preferred shares (D)	100,712	124,401
Profit for the year attributable to ordinary shares (A+C)	1,134,381	1,339,211
Profit for the year attributable to preferred shares (B+D)	131,587	155,276

[2] Weighted average numbers of shares are calculated as follows:

	2013			
Ordinary shares	**Period**	**Number of shares**	**Number of days**	**Number of shares x days**
Beginning balance	2013. 1. 1 ~ 2013.12.31	65,911,310	365	24,057,628,150
Purchase of treasury shares	2013.12.31 ~ 2013.12.31	(2)	1	(2)
Total				24,057,628,148

Weighted average number of ordinary shares outstanding: 24,057,628,148 / 365 = 65,911,310 shares

	2013			
Preferred shares	**Period**	**Number of shares**	**Number of days**	**Number of shares x days**
Beginning	2013. 1. 1 ~ 2013.12.31	7,623,402	365	2,782,541,730
Total				2,782,541,730

Weighted average number of preferred shares outstanding: 2,782,541,730 / 365 = 7,623,402 shares

	2012			
Ordinary shares	**Period**	**Number of shares**	**Number of days**	**Number of shares x days**
Beginning	2012. 1. 1 ~ 2012.12.31	65,911,316	366	24,123,541,656
Purchase of treasury shares	2012.12.31 ~ 2012.12.31	(6)	1	(6)
Total				24,123,541,650

Weighted average number of ordinary shares outstanding: 24,123,541,650 / 366 = 65,911,316 shares

	2012			
Preferred shares	**Period**	**Number of shares**	**Number of days**	**Number of shares x days**
Beginning	2012. 1. 1 ~ 2012.12.31	7,623,402	366	2,790,165,132
Total				2,790,165,132

Weighted average number of preferred shares outstanding: 2,790,165,132 / 366 = 7,623,402 shares

There were no dilutive potential outstanding ordinary shares at the reporting date. Accordingly, diluted earnings per share for profit attributable to owners of the Parent Company is identical to basic earnings per share.

32. Dividends

Details of dividends are as follows:

	2013	**2012**
Number of shares entitled to dividends: shares issued and outstanding (par value per share: ₩5,000)		
Ordinary shares	65,911,308	65,911,310
Preferred shares	7,623,402	7,623,402
Dividend per share *(in won)*		
Ordinary shares: cash	4,000 (80%)	4,000 (80%)
Preferred shares: cash	4,050 (81%)	4,050 (81%)
Cash dividends to distribute *(in millions of Korean won)*		
Ordinary shares	263,645	263,645
Preferred shares	30,875	30,875
	294,520	294,520

Dividend payout ratios for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	**2013**	**2012**
Dividends (A)	294,520	294,520
Profit for the year attributable to owners of the Parent Company (B)	1,265,968	1,494,487
Dividend payout ratio (A/B)	23.26%	19.71%

Dividend yield ratios for the years ended December 31, 2013 and 2012, are as follows:

	2013		**2012**	
(in Korean won)	**Ordinary shares**	**Preferred Shares**	**Ordinary shares**	**Preferred Shares**
Dividend per share (A)	4,000	4,050	4,000	4,050
Market value at the end of year (B)[1]	293,875	153,875	335,625	105,625
Dividend yield ratio (A/B)	1.36%	2.63%	1.19%	3.83%

[1] Average price in the stock market during the week preceding the two business days before the record date of the shareholders' list for the general meeting of shareholders related to above dividends.

33. Related party transactions

As of December 31, 2013 and 2012, LG Group is an entity exercising significant influence over the Company which owns 33.53% of the Company's ordinary shares.

Details of associates and other related parties that have sales and other transactions with the Company or have receivables and payables balances as of December 31, 2013 and 2012, are as follows and details of investments in subsidiaries, associates and joint ventures are described in Note 1.3.

Related parties	**Related parties' subsidiaries (Domestic)**	**Related parties' subsidiaries (foreign)**	**Details**
SERVEONE	LG-TOYO Engineering Co., Ltd.	Serveone(Nanjing) Co., LTD. and others	Subsidiary of LG Corp
LG CNS Co., Ltd.	LG N-Sys Inc., BNE PARTNERS Inc., Ever ON Co., Ltd., V-ENS Co.,Ltd.[1]	LG CNS China Inc. and others	Subsidiary of LG Corp
LG Siltron Incorporated	-	-	Subsidiary of LG Corp
LG Management Development Institute	-	-	Subsidiary of LG Corp
LG SPORTS Ltd.	-	-	Subsidiary of LG Corp
LG MMA Corporation	-	-	Subsidiary of LG Corp

[1] As of December 31, 2012, V-ENS Co., Ltd. was a subsidiary of LG CNS Co., Ltd. However, as of December 31, 2013, V-ENS Co., Ltd. was excluded from the scope of other related parties as it merged with LG Electronics Inc. during 2013.

Sales and purchases with related parties for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	2013			
		Purchase and others		
	Sales and others	Purchase of raw material /merchandise	Acquisition of property, plant and equipment	Others
Entities with significant influence over the Company[1]				
LG Corp.	13	-	-	54,841
Associates and joint ventures				
SEETEC Co., Ltd.	59,413	171,866	33	78,537
TECWIN Co., Ltd.	-	5,752	-	-
HL Greenpower Co., Ltd.	74,893	-	-	152
Others	50	-	-	1,003
Other related parties[2]				
LG MMA Corporation	133,685	143,892	-	2,058
SERVEONE and its subsidiaries	19,791	399,921	301,192	56,125
LG CNS Co., Ltd. and its subsidiaries	3,840	8,465	56,499	49,296
Others	376	-	-	9,369
Key management	-	-	-	40,891
Total	292,061	729,896	357,724	292,272

(in millions of Korean won)	2012			
		Purchase and others		
	Sales and others	Purchase of raw material /merchandise	Acquisition of property, plant and equipment	Others
Entities with significant influence over the Company[1]				
LG Corp.	12	-	-	54,844
Associates and joint ventures				
SEETEC Co., Ltd.	36,955	94,373	6	69,782
TECWIN Co., Ltd.	-	314	18,698	998
HL Greenpower Co., Ltd.	78,437	-	-	1
Others	29	-	-	1,291
Other related parties[2]				
LG MMA Corporation	146,876	152,014	-	2,475
SERVEONE and its subsidiaries	23,456	381,649	358,438	75,190
LG CNS Co., Ltd. and its subsidiaries	6,653	5,420	50,047	48,001
Others	411	-	-	8,017
Key management	-	-	-	38,261
Total	292,829	633,770	427,189	298,860

Year-end balances of receivables and payables arising from sales and purchases of goods and services as of December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	December 31, 2013		December 31, 2012	
	Receivable and others	**Payable and others**	**Receivable and others**	**Payable and others**
Entities with significant influence over the Company[1]				
LG Corp.	6,935	64	6,948	1,456
Associates and joint ventures				
SEETEC Co., Ltd.	-	21,135	-	19,168
TECWIN Co., Ltd.	-	1,719	-	916
HL Greenpower Co., Ltd.	11,440	89	27,345	-
Others	22	56	14	-
Other related parties[2]				
LG MMA Corporation	15,292	12,724	13,270	15,701
SERVEONE and its subsidiaries	28,252	174,615	28,006	168,219
LG CNS Co., Ltd. and its subsidiaries	2,755	29,550	5,179	26,177
Others	3,775	674	3,778	331
Key management	-	45,447	-	48,781
Total	68,471	286,073	84,540	280,749

Fund transactions with related parties for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	Equity contributions in cash	
	2013	**2012**
Associates and joint ventures		
KLPE Limited Liability Partnership	18,680	75,565
LG Chem BRASIL INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	321	-
LG Fuel Cell Systems Inc.	6,419	15,709
Total	25,420	91,274

Compensation for key management of the Company for the years ended December 31, 2013 and 2012, consists of:

(in millions of Korean won)	**2013**	**2012**
Wages and salaries	38,703	36,909
Pension costs	2,188	1,352
Total	40,891	38,261

Key management includes directors and audit committee members having duties and responsibilities over planning, operations and controlling of the Company's business activities.

There are no provisions held against receivables from related parties and thus, no bad debt expenses have been recognized in current and prior period.

Details of the guarantees provided by the Company for related parties at the reporting date are disclosed in Note 20.

34. Cash generated from operations

Reconciliation between operating profit and net cash inflow (outflow) from operating activities for the years ended December 31, 2013 and 2012, is as follows:

(in millions of Korean won)	**2013**	**2012**
Profit before income tax	1,601,296	1,880,498
Adjustments for:		
Depreciation	1,021,218	854,512
Amortization	24,015	19,026
Pension costs	78,903	56,364
Finance income	(80,242)	(93,306)
Financial expense	94,337	116,294
Foreign exchange differences	(22,841)	(60,963)
Gain on disposal of property, plant and equipment	(1,275)	(4,967)
Loss on disposal of property, plant and equipment	21,011	5,514
Impairment loss on property, plant and equipment	73,692	2,102
Gain on disposal of intangible assets	(21)	(64)
Loss on disposal of intangible assets	6,146	1,046
Impairment loss on intangible assets	3,231	-
Other expenses	29,139	13,497
Inventories	47,103	(220,875)
Trade receivables	(113,873)	(119,851)
Other receivables	5,175	(21,244)
Settlement of derivatives	511	5,118
Trade payables	(245,246)	92,830
Other payables	165,154	(161,401)
Defined benefit liability	(137,626)	(75,035)
Other cash flows from operations	(8,064)	(18,736)
Cash generated from operations	2,561,743	2,270,359

The principal non-cash transactions for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)	**2013**	**2012**
Transfer of construction-in-progress	1,881,596	1,702,867
Transfer of machinery-in-transit	206,713	367,134
Reclassification of long-term borrowings into current maturities	487,190	136,910
Gain on valuation of derivatives recognized as other comprehensive income	154	527

35. Segment information

(1) General information about the Company's reportable segments is as follows:

Segment	Products or services	Major customers
Petrochemicals	ABS, PC, EP, PE, PP, Acrylic, Alcohol, SAP, PVC, Synthetic rubber, Specialty resin, BPA, Ethylene, Propylene and others	LG International Corp., LG Electronics Inc., Daewoo Electronics Inc., National Plastic Co. Ltd., Youl Chon Chemical Co. Ltd., OCI Company Co. Ltd., Mitsui & Co. Ltd., and others
Information & Electronic Materials	Polarizers, 3D FPR and others	LG Display Co., BOE, AUO, and others
Batteries	Portable batteries, batteries for vehicles, Electricity storage batteries and others	Hewlett-Packard Co., General Motors Corp., and others
Common and others	General management, sales and R&D	

(2) The segment information on revenue and profit and loss for the years ended December 31, 2013 and 2012, is as follows:

(in millions of Korean won)	2013				
	Petro - Chemicals	Information & Electronic Materials	Batteries	Common and others[4]	Total
Total segment revenue	17,614,118	3,165,692	2,582,624	3,269	23,365,703
Inter-segment revenue[1]	68,913	140,917	8,992	3,269	222,091
Revenue from external customers[2]	17,545,205	3,024,775	2,573,632	-	23,143,612
Operating profit (loss)[3]	1,332,021	378,938	32,297	(212)	1,743,044

(in millions of Korean won)	2012				
	Petro - Chemicals	Information & Electronic Materials	Batteries	Common and others[4]	Total
Total segment revenue	17,579,443	3,451,499	2,478,926	24,033	23,533,901
Inter-segment revenue[1]	65,160	180,782	907	24,033	270,882
Revenue from external customers[2]	17,514,283	3,270,717	2,478,019	-	23,263,019
Operating profit (loss)[3]	1,436,172	435,645	38,783	(277)	1,910,323

[1] Sales between segments are carried out at arm's length.
[2] Revenue from external customers consists of sales of goods. Interest income and dividend income are included in finance income.
[3] Management assesses the performance of the operating segments based on a measure of operating profit of segment.
[4] Common and other segments include operating segments not qualifying as a reportable segment, supporting divisions as well as R&D divisions.

(3) The segment information on assets and liabilities as of December 31, 2013 and 2012, is as follows:

(in millions of Korean won)	December 31, 2013				
	Petro - Chemicals	Information & Electronic Materials	Batteries	Common and others	Total
Total assets for the segment [1]	8,812,651	2,953,818	3,111,555	2,568,440	17,446,464
Investments in associates and joint ventures	346,728	-	16,746	84,393	447,867
Total liabilities for the segment[1]	2,542,105	574,215	1,304,868	1,299,614	5,720,802

(in millions of Korean won)	December 31, 2012				
	Petro - Chemicals	Information & Electronic Materials	Batteries	Common and others	Total
Total assets for the segment [1]	8,569,342	2,790,309	3,082,677	2,138,825	16,581,153
Investments in associates and joint ventures	323,833	-	15,557	65,678	405,068
Total liabilities for the segment[1]	2,678,198	597,202	1,102,513	1,437,885	5,815,798

[1] Assets and liabilities are measured in a manner consistent with those in the financial statements and allocated on the basis of segment operation.

(4) The external sales by geographical segments from continuing operations are as follows:

(in millions of Korean won)	2013	2012
Korea[1]	9,900,642	10,067,791
China	10,189,292	9,802,912
South East Asia	1,359,226	1,694,865
America	1,734,935	1,752,895
Western Europe	1,231,345	879,755
Others	3,048,229	3,015,968
Eliminations	(4,320,057)	(3,951,167)
Total	23,143,612	23,263,019

[1] Domestic sales include the exports made through local letters of credit.

(5) There is no external customer attributing to more than 10% of total revenue for the years ended December 31, 2013 and 2012.

36. Approval of financial statements

The issuance of the December 31, 2013 consolidated financial statements of the Company was approved by the Board of Directors on January 27, 2014, which is subject to change with approval of shareholders at the annual shareholders' meeting.