

LG Chem, Ltd. and Subsidiaries

Consolidated Financial Statements

December 31, 2014 and 2013

LG Chem, Ltd. and Subsidiaries
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December 31, 2014 and 2013

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Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

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

We have audited the accompanying consolidated financial statements of LG Chem, Ltd. and its subsidiaries (collectively the "Group"), which comprise the consolidated statements of financial position as of December 31, 2014 and 2013, and the consolidated statements of income, comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS) and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with the Korean Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of LG Chem, Ltd. and its subsidiaries as of December 31, 2014 and 2013, and their financial performance and cash flows for the years then ended in accordance with the Korean IFRS.

Other Matters

The consolidated financial statements of the Group as of and for the year ended December 31, 2013, were audited in accordance with the previous Korean Standards on Auditing.

We used 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, and represent 14% of the Company's consolidated total revenue for the year ended December 31, 2013. These financial statements were audited by other auditors.

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such financial statements may differ from those generally accepted and applied in other countries.

A handwritten signature in black ink that reads "Samil PricewaterhouseCoopers". The signature is written in a cursive, flowing style.

Seoul, Korea
March 5, 2015

This report is effective as of March 5, 2015, 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, 2014 and 2013

<i>(in millions of Korean won)</i>	Notes	2014	2013
Assets			
Current assets			
Cash and cash equivalents	3, 5, 6	988,016	1,399,054
Trade receivables	3, 5, 7, 32	3,239,283	3,220,504
Other receivables	3, 5, 7, 32	916,796	640,998
Prepaid income taxes		1,421	2,171
Other financial assets	3, 5, 8, 9	783	-
Other current assets	14	283,373	204,859
Inventories	10	2,711,188	2,564,031
Non-current asset held for sale	36	5,961	-
Total current assets		8,146,821	8,031,617
Non-current assets			
Other receivables	3, 5, 7	74,223	25,026
Other financial assets	3, 5, 8	6,153	5,952
Investments in associates and joint ventures	1, 11, 34	489,450	447,867
Deferred income tax assets	29	96,823	77,069
Property, plant and equipment	12	8,699,536	8,559,609
Intangible assets	13	525,020	263,093
Other non-current assets	14	89,620	36,231
Total non-current assets		9,980,825	9,414,847
Total assets		18,127,646	17,446,464
Liabilities and equity			
Liabilities			
Current liabilities			
Trade payables	3, 5, 32	1,337,866	1,268,291
Other payables	3, 5, 32	901,648	743,318
Borrowings	3, 5, 15	2,205,720	2,206,848
Provisions	16	5,265	2,045
Current income tax liabilities	29	116,107	134,946
Other current liabilities	5, 18	242,443	242,429
Total current liabilities		4,809,049	4,597,877
Non-current liabilities			
Other payables	3, 5	54,645	76,346
Borrowings	3, 5, 15	727,830	803,634
Provisions	16	23,434	17,481
Net defined benefit liability	17	86,892	51,911
Deferred income tax liabilities	29	159,944	173,553
Total non-current liabilities		1,052,745	1,122,925
Total liabilities		5,861,794	5,720,802

LG Chem, Ltd. and Subsidiaries
Consolidated Statements of Financial Position
December 31, 2014 and 2013

<i>(in millions of Korean won)</i>	Notes	2014	2013
Equity			
Equity attributable to owners of the parent			
Share capital	1, 20	369,500	369,500
Capital surplus		1,157,772	1,157,772
Other components of equity	22	(15,699)	(15,699)
Accumulated other comprehensive income		(62,233)	(87,259)
Retained earnings	21	10,690,605	10,172,632
		<u>12,139,945</u>	<u>11,596,946</u>
Non-controlling interests		<u>125,907</u>	<u>128,716</u>
Total equity		<u>12,265,852</u>	<u>11,725,662</u>
Total liabilities and equity		<u>18,127,646</u>	<u>17,446,464</u>

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, 2014 and 2013

<i>(in millions of Korean won, except per share amounts)</i>	Notes	2014	2013
Revenue	32, 34	22,577,830	23,143,612
Cost of sales	24, 32	(19,573,940)	(19,834,673)
Gross profit		3,003,890	3,308,939
Selling, general and administrative expenses	23, 24, 32	(1,693,129)	(1,565,895)
Operating profit	34	1,310,761	1,743,044
Finance income	5, 26	127,118	203,420
Finance expenses	5, 26	(168,973)	(236,554)
Share of profit of associates and joint ventures	11	19,567	5,388
Other non-operating income	5, 27	379,141	362,351
Other non-operating expenses	5, 28, 36	(507,753)	(476,353)
Profit before income tax	33	1,159,861	1,601,296
Income tax expense	29	(305,836)	(330,683)
Profit for the year		854,025	1,270,613
Attributable to:			
Owners of the parent		867,924	1,265,968
Non-controlling interests		(13,899)	4,645
Earnings per share for profit attributable to owners of the parent (in won)	30		
Basic and diluted earnings per ordinary share		11,798	17,211
Basic and diluted earnings per preferred share		11,848	17,261

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, 2014 and 2013

<i>(in millions of Korean won)</i>	Notes	2014	2013
Profit for the year		854,025	1,270,613
Other comprehensive income (loss)			
Items not reclassifiable subsequently to profit or loss:			
Remeasurements of the net defined benefit liability	17	(72,955)	(3,590)
Shares of actuarial loss from associates		(13)	(41)
Income tax effect relating to components of other comprehensive income		17,655	868
Items reclassifiable subsequently to profit or loss:			
Currency translation differences		26,280	3,463
Cash flow hedges		-	154
Others		(1,412)	(2,508)
Income tax effect relating to components of other comprehensive income		1,433	529
Other comprehensive loss for the year, net of tax		(29,012)	(1,125)
Total comprehensive income for the year		825,013	1,269,488
Attributable to:			
Owners of the parent		837,637	1,262,923
Non-controlling interests		(12,624)	6,565

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, 2014 and 2013

(in millions of Korean won)

Notes	Attributable to owners of the parent						Non-controlling interests	Total equity
	Share capital	Capital surplus	Other components of equity	Accumulated other comprehensive income	Retained earnings	Total		
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	17	-	-	-	(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	31	-	-	-	(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
Balance at January 1, 2014	369,500	1,157,772	(15,699)	(87,259)	10,172,632	11,596,946	128,716	11,725,662
Comprehensive income:								
Profit for the year	-	-	-	-	867,924	867,924	(13,899)	854,025
Remeasurements of the net defined benefit liability	17	-	-	-	(55,300)	(55,300)	-	(55,300)
Currency translation differences	-	-	-	26,438	-	26,438	1,275	27,713
Others	-	-	-	(1,412)	(13)	(1,425)	-	(1,425)
Total comprehensive income	-	-	-	25,026	812,611	837,637	(12,624)	825,013
Transactions with owners:								
Dividends	31	-	-	-	(294,520)	(294,520)	(5,309)	(299,829)
Incorporation of a subsidiary	-	-	-	-	-	-	15,597	15,597
Others	-	-	-	-	(118)	(118)	(473)	(591)
Total transactions with owners	-	-	-	-	(294,638)	(294,638)	9,815	(284,823)
Balance at December 31, 2014	369,500	1,157,772	(15,699)	(62,233)	10,690,605	12,139,945	125,907	12,265,852

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, 2014 and 2013

<i>(in millions of Korean won)</i>	Notes	2014	2013
Cash flows from operating activities			
Cash generated from operations	33	2,430,461	2,561,743
Interest received		43,697	38,317
Interest paid		(83,162)	(90,370)
Dividends received		18,788	1,407
Income taxes paid		(415,359)	(328,213)
Net cash generated from operating activities		1,994,425	2,182,884
Cash flows from investing activities			
Decrease in other receivables		953,973	1,234,072
Decrease in non-current other receivables		28,035	19,293
Proceeds from disposal of property, plant and equipment		10,721	8,099
Proceeds from disposal of intangible assets		(14)	383
Increase in other receivables		(1,304,098)	(1,121,188)
Increase in non-current other receivables		(39,443)	(23,428)
Increase in non-current other financial assets		(114)	(74)
Acquisition of investments in associates and joint ventures		(41,935)	(25,420)
Acquisition of property, plant and equipment		(1,411,268)	(1,360,673)
Acquisition of intangible assets		(50,098)	(41,322)
Business combination	35	(136,418)	-
Net cash used in investing activities		(1,990,659)	(1,310,258)
Cash flows from financing activities			
Proceeds from borrowings		494,236	339,848
Incorporation of a subsidiary		15,555	-
Repayments of borrowings		(647,657)	(230,245)
Dividends paid		(299,850)	(308,405)
Net cash used in financing activities		(437,716)	(198,802)
Net increase(decrease) in cash and cash equivalents		(433,950)	673,824
Cash and cash equivalents at the beginning of year		1,399,054	720,767
Exchange gains on cash and cash equivalents		22,912	4,463
Cash and cash equivalents at the end of year		988,016	1,399,054

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

LG Chem, Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2014 and 2013

1. General information

General information about LG Chem, Ltd. (the “Parent Company”) and its subsidiaries (collectively the “Group”) 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.

The Parent Company merged with LG Polycarbonate Ltd. on April 1, 2011.

As of December 31, 2014, 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, 2014, 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 Group is engaged in Petrochemicals business, IT & Electronic materials, and Energy solution 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 Group's major products are ABS, PC, EP, PE, PP, synthetic rubber, acrylic, plasticizers, SAP, PVC, BPA, a special resin, and others.

The IT & Electronic material business manufactures and supplies various display materials such as polarizer, 3D FPR, sensitized material, PCB materials, ITO film and OLED-related materials. The Group has developed film-type 3D FPR, a core material of FPR-type 3D TV, and began its commercial production since 2011. From 2013, the Group began to produce polarizer-integrated FPR in order to improve customer productivity and lead the market. In addition, the Group completed the expansion of two polarizing plate line in Nanjing, China, in order to proactively respond to the growing panel market in China in 2014.

The Energy solution business manufactures and supplies batteries ranging from small batteries for laptop computers and mobiles to batteries for electric vehicles. In April 2011, the Group completed the construction of the vehicle battery plant in Ochang, North Chungcheong Province, and supplies batteries to major car manufacturers such as GM, Hyundai/KIA Motor Company, Renault, Ford, and Volvo.

LG Chem, Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2014 and 2013

1.3 Consolidated subsidiaries, associates and joint ventures

	December 31, 2014			
	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	100	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	Service
LG Polymers 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. ³	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. ⁵	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	Battery research and manufacturing for automobile
LG Chem Power Inc.	100	USA	December 31	Battery research for automobile
LGC Petrochemical India Private Limited.	100	India	December 31	Service
Haengboknuri	100	Korea	December 31	Facility management and general cleaning
LG CHEM TK KIMYA SANAYI VE TICARET LIMITED SIRKETI	100	Turkey	December 31	Sales and trading
LG Chem Japan Inc. ⁶	100	Japan	December 31	Sales and trading
LG NanoH2O Inc. ⁷	100	USA	December 31	Water purification filter research and manufacturing
NanoH2O Singapore Private Ltd. ⁷	100	Singapore	December 31	Water purification filter research and manufacturing
NanoH2O (Jiangsu) Water Processing Technology Co. Ltd. ⁷	100	China	December 31	Water purification filter research and manufacturing
LG Chem (Nanjing) New Energy Battery Co., Ltd. ⁸	50	China	December 31	Battery manufacturing and sales
Associates				
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
LG Chem BRASIL INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA. ⁸	100	Brazil	December 31	Sales and trading
LG Fuel Cell Systems Inc. ⁹	20	USA	December 31	Power fuel cell research
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 Chem, Ltd. and Subsidiaries **Notes to the Consolidated Financial Statements** **December 31, 2014 and 2013**

SEETEC Co.,Ltd.	50	Korea	December 31	Plant utility and distribution, research assistance service
CNOOC & LG Petrochemicals Co.,Ltd.	50	China	December 31	ABS manufacturing and sales
KLPE Limited Liability Partnership ¹⁰	50	Kazakhstan	December 31	PE manufacturing and sales

¹ As of December 31, 2014, Ningbo LG Yongxing Chemical Co.,Ltd. owns 100% of Ningbo Zhenhai LG Yongxing Trade Co.,Ltd. shares.

² As of December 31, 2014, 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 ₩ 30,127 million.

⁴ As of December 31, 2014, Tianjin LG Bohai Chemical Co., Ltd. owns 20.30% of Tianjin LG BOTIAN Chemical Co., Ltd. shares.

⁵ During the year, the Parent Company acquired additional shares of LG Chem (China) Investment Co.,Ltd. for ₩5,896 million.

⁶ LG Chem Japan Inc. was established during the year and the Parent Company newly acquired 100% of its shares for ₩1,406 million.

⁷ During the year, the Parent Company newly acquired 100% of shares of NanoH2O Inc. for ₩151,411 million and NanoH2O Inc. changed its name to LG NanoH2O Inc. LG NanoH2O Inc. owns 100% of NanoH2O Singapore Private Ltd. and NanoH2O (Jiangsu) Water Processing Technology Co. Ltd. shares(Note 35).

⁸ During the year, the Parent Company newly acquired additional 50 % of shares of LG Chem (Nanjing) New Energy Battery Co., Ltd. for ₩ 15,600 million. Although the Parent Company owns less than 50% of the voting rights of LG Chem (Nanjing) New Energy Battery Co., Ltd , the Parent Company is considered to have control over the investee, as the Parent Company can exercise the majority voting rights in its decision-making process in accordance with the shareholders' agreement.

⁹Classified as an investment in associate due to its small size.

¹⁰During the year, the Parent Company acquired additional shares of LG Fuel Cell Systems Inc. for ₩ 8,402 million and as a result, the percentage of ownership increased to 20%.

¹¹During the year, the Parent Company acquired additional shares of KLPE Limited Liability Partnership for ₩33,533 million.

LG Chem, Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2014 and 2013

1.4 Summarized financial information of subsidiaries, associates and joint ventures

Summarized financial information (before elimination of intercompany transactions and adjustments for differences in accounting policies) of subsidiaries, associates and joint ventures is as follows:

	December 31, 2014				
	Assets	Liabilities	Equity	Year-to-date Revenue	Year-to-date Profit(loss)
Consolidated subsidiaries					
Tianjin LG DAGU Chemical Co.,Ltd.	181,399	134,814	46,585	377,551	(30,177)
Ningbo LG Yongxing Chemical Co.,Ltd.	739,541	341,938	397,603	1,870,054	81,306
LG Chem HK Ltd.	100,332	84,306	16,026	547,380	731
LG Chem America, Inc.	175,151	160,887	14,264	704,740	1,035
LG Chemical India Pvt. Ltd.	32,635	39	32,596	470	95
LG Polymers India Pvt. Ltd.	81,160	28,311	52,849	226,436	6,063
LG Chemical (Guangzhou) Engineering Plastics Co.,Ltd.	95,367	41,059	54,308	156,389	8,527
LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd.	1,546,814	882,779	664,035	1,952,241	66,908
LG Chem (Taiwan), Ltd.	145,032	80,991	64,041	335,978	13,769
LG Chem Display Materials (Beijing) Co.,Ltd.	34,136	10,028	24,108	47,626	1,402
Tianjin LG Bohai Chemical Co.,Ltd.	334,434	178,432	156,002	405,238	(43,707)
LG Chem (China) Investment Co.,Ltd.	204,239	112,455	91,784	34,739	2,592
LG Chem (Tianjin) Engineering Plastics Co.,Ltd.	68,586	25,229	43,357	94,019	4,600
LG Chem Europe GmbH	133,687	118,619	15,068	361,953	2,932
LG Chem Poland Sp. z o.o.	33,062	17,100	15,962	79,568	(298)
LG Chem Michigan Inc.	193,990	167,994	25,996	36,607	(1,409)
LG Chem Power Inc.	6,964	6,634	330	24,185	(74)
Tianjin LG BOTIAN Chemical Co.,Ltd.	61,248	81,579	(20,331)	85,156	(13,689)
Ningbo Zhenhai LG Yongxing Trading Co.,Ltd.	5,639	3,874	1,765	13,100	239
LGC Petrochemical India Private Limited	1,134	302	832	2,818	456
Haengboknuri	1,442	517	925	3,922	254
LG CHEM TK Kimya SANAVI VE TIC. Ltd. STI	8,308	7,833	475	26,847	249
LG Chem Japan Co.,Ltd.	2,044	525	1,519	3,854	258
LG NanoH2O, Inc.	20,862	90,487	(69,625)	4,452	(26,187)
LG Chem (Nanjing) New Energy Battery Co., Ltd.	31,780	14	31,766	-	(124)
Associates					
LG Holdings (HK) Ltd.	381,532	126,574	254,958	48,569	13,131
TECWIN Co., Ltd.	41,075	9,422	31,653	46,325	1,379
LG Chem BRASIL INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	115	237	(122)	1,361	(211)
LG Fuel Cell Systems Inc.	25,518	17,838	7,680	4,258	(62,363)
Joint ventures					
LG VINA Chemical Co.,Ltd.	24,392	15,187	9,205	67,887	2,557
HL Greenpower Co.,Ltd.	93,757	57,473	36,284	138,121	2,194
SEETEC Co.,Ltd.	420,071	48,225	371,846	581,648	57,558
CNOOC & LG Petrochemicals Co.,Ltd.	281,457	225,730	55,727	129,141	(22,209)
KLPE Limited Liability Partnership	276,809	13,576	263,233	-	10,108

LG Chem, Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
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(in millions of Korean won)

	December 31, 2013				
	Assets	Liabilities	Equity	Year-to-date Revenue	Year-to-date Profit(loss)
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 SANAVI VE TIC. Ltd. STI	622	384	238	964	92
Associates					
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
LG Fuel Cell Systems Inc.	35,757	9,653	26,104	4,946	(47,068)
LG Chem BRASIL INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	142	64	78	892	(336)
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
SEETEC Co.,Ltd.	399,798	50,563	349,235	573,102	16,020
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)

1.5 Changes in Consolidation Scope

Subsidiaries newly included in the consolidation for the year ended December 31, 2014:

Subsidiary	Nature of the Change
LG Chem Japan Inc.	Newly acquired

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LG Chem (Nanjing) New Energy Battery Co., Ltd.	Newly acquired
LG NanoH2O, Inc.	Business combination
NanoH2O Singapore Private Ltd.	Business combination
NanoH2O (Jiangsu) Water Processing Technology Co. Ltd.	Business combination

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 periods presented, unless otherwise stated.

2.1 Basis of preparation

The Group 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 Group's financial position, financial performance or cash flows, is not presented in the accompanying consolidated financial statements.

The consolidated financial statements of the Group 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 Group'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

(1) New and amended standards adopted by the Group

The Group newly applied the following amended and enacted standards for the annual period beginning on January 1, 2014:

- Enactment of Korean IFRS 2121, *Levies*

Korean IFRS 2121, *Levies* is applied to a liability to pay a levy imposed by the 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 application of this interpretation does not have a material impact on the consolidated financial statements.

- Amendment to Korean IFRS 1102, *Share-based payment*

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Korean IFRS 1102, *Share-based payment*, clarifies the definition of 'vesting conditions' such as 'performance condition', 'service condition' and others. This amendment is applied to share-based payment transactions for which the grant date is on or after July 1, 2014. The application of this amendment does not have a material impact on the 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. The application of this amendment does not have a material impact on the consolidated financial statements.

- Amendment to Korean IFRS 1036, *Impairment of Assets*

Amendment to Korean IFRS 1036, *Impairment of Assets*, removed certain disclosures of the recoverable amount of cash-generating units which had been included in this amendment by the issuance of Korean IFRS 1113. The application of this amendment does not have a material impact on the 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. The application of this amendment does not have a material impact on the consolidated financial statements.

Other standards, amendments and interpretations which are effective for the annual period beginning on January 1, 2014, do not have a material impact on the financial statements of the Group.

(2) New standards and interpretations not yet adopted

The Group expects that new standards, amendments and interpretations issued but not effective for the annual period beginning on January 1, 2014 and not early adopted would not have a material impact on its consolidated financial statements.

2.3 Consolidation

The Group 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. The 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 Group 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

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their fair values at the acquisition date. The Group 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 Group subsidiaries are eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

(2) Associates

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

(3) Joint Arrangements

A joint arrangement, wherein 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 venture has rights to the net assets relating to the joint venture and accounts for that investment using the equity method.

2.4 Segment Reporting

Each operating segment is reported in a manner consistent with the business segment reporting provided to the chief operating decision-maker (Note 34). 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 Group'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

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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 Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less.

2.7 Financial Assets

(1) Classification and measurement

The Group 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.

(2) Impairment

The Group 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.

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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 Group 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.

(3) Derecognition

If the Group transfers a financial asset and the transfer does not result in derecognition because the Group 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 Group 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 15).

2.8 Derivative 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.

2.9 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.

2.10 Property, plant and equipment

Property, plant and equipment are 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.

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2.11 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.

2.12 Government grants

Government grants are recognized at their fair values when there is reasonable assurance that the grant will be received and the Group 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.

2.13 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

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2.14 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.

2.15 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.

2.16 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 Group 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.

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2.17 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.

2.18 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.

2.19 Employee benefits

The Group has both defined benefit and defined contribution plans. A defined contribution plan is a pension plan under which the Group 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.

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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.

2.20 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 Group. It is stated as net of value added taxes, returns, rebates and discounts, after elimination of intra-company transactions.

The Group 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 Group's activities, as described below. The Group 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 Group 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 Group 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.

2.21 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 Group 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 Group 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.

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2.22 Non-current assets (or disposal group) held-for-sale

Non-current assets (or disposal group) are classified as assets held-for-sale when their carrying amount is to be recovered principally through a sale transaction and a sale is considered highly probable. The assets are measured at the lower amount between their carrying amount and the fair value less costs to sell.

3. Financial risk management

3.1 Financial risk factors

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

Risk management is carried out by the Group'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 Group's operating units. The Corporate Management Committee reviews and approves 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 Group 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 Group 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 Group 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 Group's foreign operations is managed primarily through borrowings denominated in the relevant foreign currencies.

As of December 31, 2014 and 2013, the Group's monetary assets and liabilities denominated in currencies other than its functional currency, are as follows:

(in millions of Korean won)	2014		2013	
	Assets	Liabilities	Assets	Liabilities
USD	1,918,095	2,527,236	1,982,900	2,466,188
EUR	66,431	106,051	65,178	93,749
JPY	33,347	110,044	23,922	94,583
GBP and others	3,135	2,225	3,848	3,734

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As of December 31, 2014 and 2013, if the Group'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:

<i>(in millions of Korean won)</i>	2014		2013	
	10% Increase	10% Decrease	10% Increase	10% Decrease
USD	(60,914)	60,914	(48,329)	48,329

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

2) 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 Group adequately minimizes risks from interest rate fluctuations through various policies, such as sharing excess cash within the Group (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 1% (100 basis points) higher/lower of interest rate with all other variables held constant on the Group's post-tax profit for the years ended December 31, 2014 and 2013, and on equity as of December 31, 2014 and 2013, is as follows:

<i>(in millions of Korean won)</i>	Impact on post-tax profit		Impact on equity	
	2014	2013	2014	2013
Increase	(17,107)	(16,393)	(17,107)	(16,393)
Decrease	17,107	16,393	17,107	16,393

(2) Credit risk

Credit risk is managed on the 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, 2014 and 2013, the maximum degrees of credit exposures are as follows:

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(in millions of Korean won)	2014			2013		
	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)	5,233,335	(16,581)	5,216,754	5,300,464	(14,951)	5,285,513
Financial assets at fair value through profit or loss	783	-	783	-	-	-
Total	5,234,118	(16,581)	5,217,537	5,300,464	(14,951)	5,285,513

In addition, details of financial guarantees provided by the Group are disclosed in Notes 3.1.(3) and 19.

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

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

The Group has deposited its cash and cash equivalents, and other long-term deposits in several financial institutions, such as Woori Bank and others. The Group has also entered into derivative contracts with several financial institutions. The Group 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

Finance team monitors rolling forecasts of the Group'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 Group does not breach borrowing limits or covenants on any of its borrowing facilities. Such forecasting takes into consideration the Group'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 Group's non-derivative financial liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date. Cash flows presented below are gross cash flows before discount, and includes cash flows for interests.

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(in millions of Korean won)

December 31, 2014				
	Less than 1 year	1 to 2 years	2 to 5 years	Over 5 years
Borrowings (excluding finance lease liabilities)	2,240,804	408,399	342,708	59
Trade and other payables	2,239,514	54,595	50	-
Total	4,480,318	462,994	342,758	59

(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	2,011,609	51,154	25,192	-
Total	4,360,463	537,028	380,725	278

- 2) The table below analyzes the Group's 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, 2014			
		Less than 1 year	1 to 2 years	2 to 5 years	Over 5 years
Gross-settled derivative financial liabilities	Trading				
	Inflow	52,445	-	-	-
	Outflow	(51,662)	-	-	-
	Total	783	-	-	-

- 3) The table below analyzes the Group'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, 2014				
	Less than 1 year	1 to 2 years	2 to 5 years	Over 5 years
Financial guarantee contracts ¹	144	157	548	192

(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

¹ The Parent 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 19).

3.2 Capital risk management

The Group's capital objectives are to safeguard the Group'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 Group monitors capital on the basis of the gearing ratio.

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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, 2014 and 2013, are as follows:

*(in millions of Korean won,
except for ratios)*

	2014	2013
Total borrowings (Note 15) (A)	2,933,550	3,010,482
Less: cash and cash equivalents (B)	<u>(988,016)</u>	<u>(1,399,054)</u>
Net debt (C=A+B)	<u>1,945,534</u>	<u>1,611,428</u>
Total liabilities (D)	5,861,794	5,720,802
Total equity (E)	12,265,852	11,725,662
Total capital (F=C+E)	14,211,386	13,337,090
Gearing ratio (C/F)	13.7%	12.1%
Debt-to-equity ratio (D/E)	47.8%	48.8%

3.3 Fair value estimation

(1) Carrying amount and fair value of financial instruments by category as of December 31, 2014 and 2013, are as follows:

(in millions of Korean won)

	2014		2013	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets(current)				
Cash and cash equivalents	988,016	1	1,399,054	1
Financial deposits	780,489	1	528,926	1
Trade receivables	3,239,283	1	3,220,504	1
Other receivables(excluding financial deposits)	136,306	1	112,072	1
Derivative financial instruments	783	783	-	-
Financial assets(non-current)				
Financial deposits	27,236	1	24	1
Other non-current receivables(excluding financial deposits)	46,987	1	25,002	1
Other non-current financial assets	6,153	2	5,952	2
Financial liabilities(current)				
Trade and other payables	2,239,514	1	2,011,609	1
Borrowings(current)	2,205,720	1	2,206,848	1
Other current liabilities(dividends payable)	1,042	1	1,071	1
Financial liabilities(non-current)				
Borrowings (non-current)	727,830	740,170	803,634	793,883
Other non-current payables	54,645	52,955	76,346	72,500

¹ These financial assets and liabilities are not included in the disclosure above as their carrying

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amount is a reasonable approximation of the fair value.

² All other non-current financial assets of the Parent Company consist of available-for-sale equity securities and are measured at cost (December 31, 2014: ₩ 6,153 million; December 31, 2013: ₩ 5,952 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 disclosure above (Note 8). The Parent Company does not have any plans to dispose of these available-for-sale equity securities in the near future.

(2) Fair value for measurement and disclosure are determined based on the following method.

1) Derivative financial instruments

The Parent Company determines derivative financial instruments 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. 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.

2) Financial liabilities(non-current)

Fair values of financial liabilities(non-current) are based on cash outflows discounted using Korean won currency note yield in the same credit grade with the Parent Company (AA+), and the applied discount rates as of December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Discount rate	2.26%~2.68%	3.03%~3.80%

(3) Fair value hierarchy

Assets measured at fair value or for which the fair value is disclosed are categorized within the fair value hierarchy, and the defined levels are as follows:

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

Fair value hierarchy classifications of the financial assets and financial liabilities that are measured at fair value or its fair value is disclosed as of December 31, 2014 and 2013, are as follows:

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(in millions of Korean won)

	2014			
	Level 1	Level 2	Level 3	Total
Financial assets/liabilities that are measured at fair value				
Derivative financial assets	-	783	-	783
Borrowings (non-current)	-	740,170	-	740,170
Other non-current payables	-	52,955	-	52,955

(in millions of Korean won)

	2013			
	Level 1	Level 2	Level 3	Total
Financial assets/liabilities that are measured at fair value				
Derivative financial assets	-	-	-	-
Borrowings (non-current)	-	793,883	-	793,883
Other non-current payables	-	72,500	-	72,500

4. Critical accounting estimates and assumptions

The Group 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 Group 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 13).

(2) Income taxes

The Group 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 29).

(3) Provisions

The Group recognizes provisions for product warranties and sales return as of the reporting date as described in Note 16. 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 17).

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5. Financial instruments by category

Categorizations of financial instruments are as follows:

(in millions of Korean won)

Financial assets	December 31, 2014			
	Loans and receivables	Assets at fair value through profit or loss	Assets classified as available-for-sale	Total
Cash and cash equivalents	988,016	-	-	988,016
Trade receivables	3,239,283	-	-	3,239,283
Other receivables	916,796	-	-	916,796
Other current financial assets	-	783	-	783
Other non-current receivables	74,223	-	-	74,223
Other non-current financial assets	-	-	6,153	6,153
Total	5,218,318	783	6,153	5,225,254

(in millions of Korean won)

Financial liabilities	December 31, 2014			
	Financial liabilities at fair value through profit or loss	Liabilities at amortized cost	Other liabilities ¹	Total
Trade payables	-	1,337,866	-	1,337,866
Other payables	-	901,648	-	901,648
Borrowings (current)	-	1,220,999	984,721	2,205,720
Other current liabilities (dividends payable)	-	1,042	-	1,042
Other non-current payables	-	54,645	-	54,645
Borrowings (non-current)	-	727,830	-	727,830
Total	-	4,244,030	984,721	5,228,751

(in millions of Korean won)

Financial assets	December 31, 2013		
	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

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Financial liabilities	December 31, 2013			
	Financial liabilities at fair value through profit or loss	Liabilities at amortized cost	Other liabilities ¹	Total
Trade payables	-	1,268,291	-	1,268,291
Other payables	-	743,318	-	743,318
Borrowings (current)	-	1,269,050	937,798	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	-	4,161,710	937,798	5,099,508

¹ Other financial liabilities include capital lease liabilities that have been excluded from the scope of 'financial liabilities by category' and financial liabilities related to transferred financial assets that are not qualified for derecognition.

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

(in millions of Korean won)

	2014	2013
Assets at fair value through profit or loss		
Loss on valuation/ disposal	(1,423)	(1,841)
Hedging derivatives		
Gain on valuation recognized in other comprehensive expenses	-	154
Interest expense	-	(179)
Assets classified as available-for-sale		
Dividend income	202	190
Loans and receivables		
Interest income	45,463	35,733
Loss on foreign currency translation	(634)	(12,504)
Gain(loss) on foreign exchange	37,900	(62,725)
Liabilities at amortized cost		
Interest expense	(75,414)	(81,937)
Gain on foreign currency translation	8,718	25,263
Gain(loss) on foreign exchange	(28,633)	34,043
Other liabilities		
Interest expense	(10,145)	(10,651)
Gain(loss) on foreign currency translation	(8,082)	5,289
Gain(loss) on foreign exchange	(24,285)	13,971

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6. Cash and cash equivalents

Details of cash and cash equivalents are as follows:

<i>(in millions of Korean won)</i>	December 31, 2014	December 31, 2013
Bank deposits and cash on hand	290,451	341,854
Financial deposits, others	697,565	1,057,200
Total	988,016	1,399,054

As of December 31, 2014, cash and cash equivalents include deposits with banks of ₩984 million held by a subsidiary which are not freely remissible to the Parent Company because of currency exchange restrictions (2013: ₩4,167 million).

7. Trade and other receivables

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

<i>(in millions of Korean won)</i>	December 31, 2014			December 31, 2013		
	Original amount	Less: allowance for doubtful accounts	Carrying amount	Original amount	Less: allowance for doubtful accounts	Carrying amount
Trade receivables ¹	3,255,864	(16,581)	3,239,283	3,235,455	(14,951)	3,220,504
Other current receivables	916,796	-	916,796	640,998	-	640,998
Other non-current receivables ²	74,223	-	74,223	25,026	-	25,026
Total	4,246,883	(16,581)	4,230,302	3,901,479	(14,951)	3,886,528

¹ As of December 31, 2014, trade receivables transferred to financial institutions but not fully derecognized are as follows (Note 15):

<i>(in millions of Korean won)</i>	Loans and receivables (trade receivables collateralized borrowings)	
	December 31, 2014	December 31, 2013
Carrying amount of transferred assets	984,721	934,724
Carrying amount of related liabilities	(984,721)	(934,724)

² As of December 31, 2014, other non-current receivables amounting to ₩671 million are restricted from withdrawal in connection with maintaining checking accounts (2013: ₩24 million).

Details of other receivables are as follows:

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	December 31, 2014	December 31, 2013
Current		
Non-trade receivables	111,874	84,856
Financial deposits ¹	780,489	528,926
Accrued income	5,058	3,930
Deposits	19,375	23,286
	<u>916,796</u>	<u>640,998</u>
Non-current		
Non-trade receivables	15	-
Financial deposits ¹	27,236	24
Loans	305	298
Deposits	46,667	24,704
	<u>74,223</u>	<u>25,026</u>
Total	<u>991,019</u>	<u>666,024</u>

¹ As of December 31, 2014, certificates of deposit included within financial deposits amounting to ₩35,800 million have been pledged as collateral to SH Corporation in relation to the acquisition of LG Science Park land.

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

(in millions of Korean won)

	December 31, 2014		December 31, 2013	
	Trade receivables	Other receivables	Trade receivables	Other receivables
Receivables not past due	3,115,050	972,297	2,988,575	644,446
Past due but not impaired				
Up to 3 months	125,642	14,874	232,631	18,729
3 to 6 months	5,202	745	5,178	1,032
Over 6 months	1,136	3,103	3,500	1,817
Impaired receivables	8,834	-	5,571	-
	<u>3,255,864</u>	<u>991,019</u>	<u>3,235,455</u>	<u>666,024</u>

The movements in bad debt allowance for the years ended December 31, 2014 and 2013, are as follows:

(in millions of Korean won)

	2014				2013			
	Trade receivables		Other receivables		Trade receivables		Other receivables	
	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current
Beginning balance	14,951	-	-	-	10,110	-	-	-
Additions	2,435	-	-	-	6,453	-	-	-
Write-off	(971)	-	-	-	(868)	-	-	-
Exchange differences	166	-	-	-	(744)	-	-	-
Ending balance	<u>16,581</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>14,951</u>	<u>-</u>	<u>-</u>	<u>-</u>

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

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8. Other financial assets and liabilities

Details of other financial assets and other financial liabilities are as follows:

<i>(in millions of Korean won)</i>	December 31, 2014	December 31, 2013
Other financial assets		
Derivatives (Note 9)	783	-
Available-for-sale	6,153	5,952
Less: current portion	(783)	-
	<u>6,153</u>	<u>5,952</u>

The movements in financial assets classified as available-for-sale for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Beginning balance	5,952	21,811
Acquisition	197	-
Exchange differences	4	(9)
Transfer ¹	-	(15,850)
Ending balance	<u>6,153</u>	<u>5,952</u>
Less: current portion	-	-
Total	<u>6,153</u>	<u>5,952</u>

¹ In 2013, the 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. (Note 11).

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, 2014 and 2013.

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9. Derivative financial instruments

Details of derivative financial assets and liabilities are as follows:

<i>(in millions of Korean won)</i>	December 31, 2014		December 31, 2013	
	Assets	Liabilities	Assets	Liabilities
Current				
Held-for-trading	783	-	-	-
	<u>783</u>	<u>-</u>	<u>-</u>	<u>-</u>

Details of derivative financial contracts as of December 31, 2014, are as follows:

2014					
Classification	Contractor	Contract date	Contract amount (in thousands)	Contract period	Contract terms
Forward exchange	Shinhan Bank and 4 other banks	2014.12.03, others	US\$ 10,000, others	2015.01.02 ~ 2015.01.06,	₩ 1,117.95/US\$1, others

10. Inventories

Details of inventories are as follows:

<i>(in millions of Korean won)</i>	2014			2013		
	Original amount	Valuation allowance	Carrying amount	Original amount	Valuation allowance	Carrying amount
Merchandise	74,386	(1,150)	73,236	67,723	(952)	66,771
Finished products	1,168,497	(41,951)	1,126,546	1,160,004	(40,127)	1,119,877
Semi-finished products	430,141	-	430,141	372,872	-	372,872
Work-in-process	832	-	832	1,151	-	1,151
Raw materials	731,657	(3,510)	728,147	708,986	(2,203)	706,783
Supplies	95,163	-	95,163	90,193	-	90,193
Materials-in-transit	257,123	-	257,123	206,384	-	206,384
Total	<u>2,757,799</u>	<u>(46,611)</u>	<u>2,711,188</u>	<u>2,607,313</u>	<u>(43,282)</u>	<u>2,564,031</u>

The cost of inventories recognized as expense and included in 'cost of sales' amounted to ₩ 15,701,320 million (2013: ₩16,445,699 million).

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11. Investments in associates and joint ventures

Changes in the carrying amount of investments in associates and joint ventures for the years ended December 31, 2014 and 2013, are as follows:

(in millions of Korean won)

	2014						
	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.	3,473	-	(974)	1,022	161	-	3,682
HL Greenpower Co., Ltd.	16,746	-	-	1,109	-	(40)	17,815
LG Holdings (HK) Ltd.	63,445	-	-	3,414	1,262	-	68,121
TECWIN Co., Ltd.	5,955	-	(20)	220	-	-	6,155
SEETEC Co., Ltd.	164,735	-	(17,500)	30,505	-	27	177,767
LG Chem Brasil INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	579	-	-	-	-	-	579
CNOOC & LG Petrochemicals Co., Ltd.	38,745	-	-	(11,104)	223	-	27,864
KLPE Limited Liability Partnership ¹	139,774	33,533	-	4,953	(2,846)	-	175,414
LG Fuel Cell Systems Inc.	14,415	8,402	-	(10,552)	(212)	-	12,053
Total	447,867	41,935	(18,494)	19,567	(1,412)	(13)	489,450

(in millions of Korean won)

	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.	-	22,269	-	(7,762)	(98)	6	14,415
Total	405,068	41,270	(1,311)	5,388	(2,507)	(41)	447,867

¹ During the year, the Group acquired additional shares of KLPE Limited Liability Partnership for ₩33,533 million.

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12. Property, plant and equipment

Changes in the carrying amounts of property, plant and equipment for the years ended December 31, 2014 and 2013, are as follows:

(in millions of Korean won)	2014										
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Others	Construction -in-progress	Machinery- in-transit	Total
Beginning balance											
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)
	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
Business combination(Note 35)	1,105	2,353	-	2,689	-	1,077	403	-	4,003	-	11,630
Acquisitions/ Transfer	97,246	149,538	49,461	972,941	2,591	126,141	26,620	80,760	1,210,236	110,049	2,825,583
Disposals/ Transfer	(490)	(4,627)	(232)	(18,997)	(34)	(9,773)	(1,496)	-	(1,296,143)	(179,862)	(1,511,654)
Exchange differences	(105)	4,283	192	8,500	7	939	252	-	6,569	-	20,637
Depreciation	-	(57,558)	(38,434)	(837,863)	(3,092)	(84,438)	(27,821)	(68,648)	-	-	(1,117,854)
Impairment	(81)	(11,371)	(9,455)	(39,059)	(79)	(1,180)	(477)	-	(20,814)	-	(82,516)
Transfer to non-current assets held for sale (Note 36)	-	-	-	(5,517)	(43)	(311)	(28)	-	-	-	(5,899)
Ending balance	910,503	1,965,575	573,870	4,079,635	8,788	308,911	89,214	85,194	593,115	84,731	8,699,536
Cost	911,867	2,436,140	978,989	10,880,815	36,885	737,092	269,026	251,722	643,843	84,731	17,231,110
Accumulated depreciation	-	(446,856)	(393,474)	(6,707,065)	(27,958)	(419,906)	(178,020)	(166,528)	-	-	(8,339,807)
Accumulated impairment	(1,364)	(23,709)	(11,645)	(94,115)	(139)	(8,275)	(1,792)	-	(50,728)	-	(191,767)

(in millions of Korean won)	2013										
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Others	Construction -in-progress	Machinery- in-transit	Total
Beginning balance											
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)
	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
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)

During the year ended December 31, 2014, the Group capitalized ₩6,384 million of borrowing costs (2013: ₩27,528 million) to property, plant and equipment.

The details of property, plant and equipment that have been pledged as collateral for certain bank loan as of December 31, 2014 and 2013, are as follows:

(in millions of Korean won)	2014				
	Carrying amount	Collateral value	Related account	Related amount	Mortgagee
Land	3,294	3,844	Borrowings	1,498	Kookmin Bank
Building	9,264	4,943	(Note 15)		

(in millions of Korean won)	2013				
	Carrying amount	Collateral value	Related account	Related amount	Mortgagee

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Land	3,294	3,844	Borrowings	1,620	Kookmin Bank
Building	9,539	4,943	(Note 15)		

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

<i>(in millions of Korean won)</i>	2014	2013
Cost of sales	1,050,174	960,753
Selling, general and administrative expenses	67,447	60,465
Others	233	183
Total	1,117,854	1,021,401

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

During 2014 and 2013, the separator division, managed as a CGU in IT & Electronic Materials segments, has been tested for impairment because its sales volume was lower than expected.

During 2014, Chinese PVC division, managed as a CGU of the Petrochemical business segment, was tested for impairment due to its deteriorating performance in earnings as a result of a significant price drop of the PVC products.

During 2013, the US battery division for vehicles, managed as a separate cash-generating unit (hereafter 'CGU') in Energy solution 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 impairment is mainly related to machinery and equipment used in manufacturing.

During 2014 and 2013, the amount of impairment loss recognized as other non-operating expenses and key assumptions used for calculation of value in use are as follows:

<i>(in millions of Korean won)</i>	2014		2013	
	Chinese PVC division	Separator division	US battery division for vehicles	Separator division
Impaired amount				
Property, plant and equipment	52,496	23,053	25,878	46,363
Intangible assets	192	415	140	3,091
Key assumptions				
Pre-tax discount rate	12.0%	14.4%	13.8%	14.4%
Growth rate for subsequent years after five years	0%	0%	0%	0%

The Group decided to dispose of certain property, plant and equipment and intangible assets (Note 36). The differences between the fair value and book value were recognized as impairment losses. The amounts classified as other non-operating expenses are as follows:

<i>(in millions of Korean won)</i>	2014
Property, plant and equipment	6,967
Intangible assets	77
	7,044

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13. Intangible assets

Changes in the carrying amount of intangible assets for the years ended December 31, 2014 and 2013, are as follows:

(in millions of Korean won)

	2014					
	Development costs	Industrial property rights	Goodwill	Memberships	Others	Total
Beginning balance	45,231	100,770	33,415	51,705	31,972	263,093
Business combination(Note 35)	-	43,716	167,169	-	35	210,920
Acquisitions/ Transfer	31,830	36,994	-	592	10,639	80,055
Disposals/ Transfer	(6,721)	(60)	-	(2,017)	(202)	(9,000)
Exchange differences	109	2,187	10,937	5	63	13,301
Amortization	(14,061)	(9,733)	-	-	(8,809)	(32,603)
Impairment	(316)	(274)	-	(61)	(33)	(684)
Transfer to non-current assets held for sale (Note 36)	(61)	-	-	-	(1)	(62)
Ending balance	56,011	173,600	211,521	50,224	33,664	525,020

(in millions of Korean won)

	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

Amortization of intangible assets was classified as follows:

(in millions of Korean won)

	2014	2013
Cost of sales	9,528	7,939
Selling, general and administrative expenses	23,075	16,076
Total	32,603	24,015

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Research and development costs recognized as expenses for the year ended December 31, 2014, amount to ₩511,241 million (2013: ₩447,044 million).

Goodwill is allocated to the Group'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
	<u>8,193</u>
Goodwill arising on the acquisition of SAP business	
Acrylic	<u>25,222</u>
Goodwill arising on the acquisition of LG NanoH2O, Inc.	
Water purification	<u>178,106</u>
Total	<u><u>211,521</u></u>

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 11.1%~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, 2014.

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14. Other current and non-current assets

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

<i>(in millions of Korean won)</i>	December 31, 2014	December 31, 2013
Current		
Prepayments to suppliers	55,327	24,970
Prepaid expenses	19,096	23,619
Prepaid value added tax	102,222	92,310
Others	106,728	63,960
Total	283,373	204,859
Non-current		
Long-term prepaid expenses	30,982	36,133
Others	58,638	98
Total	89,620	36,231

15. Borrowings

The carrying amount of borrowings is as follows:

<i>(in millions of Korean won)</i>	December 31, 2014	December 31, 2013
Current		
Short-term borrowings	1,749,702	1,719,658
Current maturities of bank loans	356,054	284,392
Current maturities of debentures	99,964	199,724
Current maturities of finance lease liabilities	-	3,074
	2,205,720	2,206,848
Non-current		
Bank loans	428,412	404,654
Debentures	299,418	398,980
	727,830	803,634
Total	2,933,550	3,010,482

Details of current borrowings are as follows:

<i>(in millions of Korean won)</i>	Bank	Latest maturity date	Annual interest rate (%) at December 31, 2014	Carrying Amount	
				December 31, 2014	December 31, 2013
Notes discounted ¹	Woori Bank, others	2015.07.22	Libor+0.70, various	984,721	934,724
Bank loans	Hangseng Bank, others	2015.12.31	Libor+0.80~2.20, various	764,981	784,934
Total				1,749,702	1,719,658

¹ As of December 31, 2014, trade receivables transferred to financial institutions but not derecognized are accounted for as collateralized borrowing transaction (Note 7).

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Details of non-current borrowings are as follows:

(in millions of Korean won)	December 31, 2014					
	Bank	Annual interest rate (%)	Latest maturity date	Total amount	Current maturities	Long-term debts
Won currency borrowings	Kookmin Bank	2.70	2018.07.14	711	127	584
	Kookmin Bank	2.70	2020.03.21	787	79	708
	Korea Development Bank	3.53	2015.07.19	200,000	200,000	-
Foreign currency borrowings	Shanghai Pudong Development Bank	5.40	2015.09.15	884	884	-
	Sumitomo Mitsui Banking Corporation	3Libor + 0.60	2017.04.03	21,984	-	21,984
	Standard Chartered Bank	3Libor + 2.20	2015.12.14	15,147	15,147	-
	Standard Chartered Bank	3Libor + 2.20	2016.09.25	19,475	4,328	15,147
	Agricultural Bank of China	5.54	2015.10.15	1,768	1,768	-
	Bank of America	2.00	2015.08.03	21,637	21,637	-
	Bank of America	6Libor + 1.60	2017.10.24	32,457	-	32,457
	BTMU	3Libor + 1.54	2015.07.20	54,960	54,960	-
	CITI	6Libor + 2.00	2017.03.10	20,556	2,164	18,392
	HSBC	3COF	2016.04.08	7,697	-	7,697
	HSBC	3Libor + 2.10	2016.08.04	32,457	-	32,457
	HSBC	3Libor + 1.45	2016.09.19	43,276	-	43,276
	HSBC	3Libor + 2.10	2016.01.22	32,456	-	32,456
	HSBC	3Libor + 2.10	2016.01.22	43,276	-	43,276
	HSBC	3Libor + 1.45	2016.11.11	43,276	-	43,276
	HSBC	3Libor + 2.10	2016.01.22	21,638	-	21,638
	JP Morgan	3Libor + 1.75	2016.07.15	21,632	-	21,632
	JP Morgan	3Libor + 1.30	2016.11.16	27,480	-	27,480
	Mizuho Banking Corporation	3Libor + 0.75	2017.05.27	65,952	-	65,952
	Nova Scotia Bank	3Libor + 1.54	2015.07.20	54,960	54,960	-
Total				784,466	356,054	428,412

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(in millions of Korean won)		December 31, 2013				
		Bank	Annual interest rate (%)	Latest maturity date	Total amount	Current maturities
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

Certain property, plant and equipment have been pledged as collaterals for the above non-current borrowings (Note 12).

Details of debentures are as follows:

(in millions of Korean won)		December 31, 2014				
	Financial institution	Annual interest rate (%)	Latest maturity date	Total amount	Current	Non-current
Won currency debentures	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			(618)	(36)	(582)
Total				399,382	99,964	299,418

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		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

Details of finance lease liabilities are as follows:

(in millions of Korean won)

		December 31, 2013			
Leaser	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	-

The finance lease liabilities were liabilities associated with sales and leaseback arrangements of property, plant and equipment of the MTBE factory and fully redeemed during the year ended December 31, 2014.

The present value of finance lease liabilities is as follows:

(in millions of Korean won)

	December 31, 2014			December 31, 2013		
	Minimum lease payments	Future finance costs	Present value	Minimum lease payments	Future finance costs	Present value
Within 1 year	-	-	-	3,195	121	3,074

16. Provisions

Changes in the carrying amount of provisions for the years ended December 31, 2014, and 2013, are as follows:

(in millions of Korean won)

	2014		
	Sales returns ¹	Warranty ²	Total
Beginning balance	1,532	17,994	19,526
Additions	33,027	8,332	41,359
Used amount	(30,642)	(1,544)	(32,186)
Ending balance	3,917	24,782	28,699
Less : current portion	(3,917)	(1,348)	(5,265)
Total	-	23,434	23,434

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(in millions of Korean won)

	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

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.

17. Net Defined benefit liability

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

(in millions of Korean won)

	December 31, 2014	December 31, 2013
Present value of obligations ¹	605,712	438,122
Fair value of plan assets	(518,820)	(386,211)
Liability in the statement of financial position	86,892	51,911

¹ The present value of retirement benefit obligations is net of existing contributions to the National Pension Plan of ₩847 million as of December 31, 2014 (2013: ₩883 million).

The amounts recognized in the statements of income for the years ended December 31, 2014 and 2013, are as follows:

(in millions of Korean won)

	2014	2013
Current service cost ¹	87,649	75,037
Past service cost	24,410	-
Interest cost	3,685	3,866
Total, included in employee benefit expenses	115,744	78,903

¹ The above amounts excluded ₩647 million (2013: ₩535million) of expenses capitalized to construction in progress and development costs.

Severance costs recognized for defined contribution plan for the year ended December 31, 2014, amounted to ₩1,486 million (2013: ₩1,263 million).

The amounts recognized in the statement of income for the years ended December 31, 2014 and 2013, are as follows:

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<i>(in millions of Korean won)</i>	2014	2013
Cost of sales	87,993	55,643
Selling, general and administrative expenses	29,237	24,523
Total	117,230	80,166

Changes in the present value of defined benefit obligations for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Beginning balance	438,122	367,567
Transfer in	1,918	1,320
Transfer out	(1,468)	(1,999)
Current service cost	88,323	75,572
Past service cost	24,410	-
Interest expense	18,075	13,307
Remeasurements:		
Actuarial gains and losses arising from changes in demographic assumptions	1,160	(3,562)
Actuarial gains and losses arising from changes in financial assumptions	59,097	(16,595)
Actuarial gains and losses arising from experience adjustments	11,485	22,588
Others	267	21
Exchange differences	(351)	(92)
Payments from plans:	(35,326)	(20,005)
Ending balance	605,712	438,122

Changes in the fair value of plan assets for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Beginning balance	386,211	261,666
Transfer in	352	72
Transfer out	(638)	(46)
Interest income	14,390	9,441
Remeasurements:		
Return on plan assets (excluding amounts included in interest income)	(946)	(1,138)
Contributions:		
Employers	145,238	130,000
Payments from plans	(25,044)	(13,176)
Administrative costs	(743)	(608)
Ending balance	518,820	386,211

The actual return on plan assets for the year ended December 31, 2014, was ₩13,444 million (2013: ₩8,303 million).

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The principal actuarial assumptions used are as follows:

	December 31, 2014	December 31, 2013
Discount rate	3.1%	4.1%
Future salary increase	5.1%	5.1%

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

<i>(in millions of Korean won)</i>	Increase by 1%	Decrease by 1%
Discount rate:		
Increase(decrease) in defined benefit obligations	(63,117)	75,536
Future salary increase		
Increase(decrease) in defined benefit obligations	73,337	(62,656)

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 year.

Plan assets consist of:

<i>(in millions of Korean won)</i>	December 31, 2014				December 31, 2013			
	Quoted price	Unquoted price	Total	Compo-sition	Quoted price	Unquoted price	Total	Compo-sition
Insurance contracts with guaranteed yield	518,820	-	518,820	100%	386,211	-	386,211	100%

As of December 31, 2014, the weighted average duration of the defined benefit obligations is 12.07 years.

The Group reviews the funding level on an annual basis and has a policy to eliminate deficit in the fund. Expected contributions to post-employment benefit plans for the year ending December 31, 2015, are ₩134,627 million.

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18. Other current liabilities

Other current liabilities consist of:

<i>(in millions of Korean won)</i>	December 31, 2014	December 31, 2013
Advances from customers	19,164	24,844
Dividends payable	1,042	1,071
Withholding	28,476	41,383
Unearned revenues	13,793	19,528
Non-trade payables	122,253	68,511
Accrued expenses	57,219	87,092
Others	496	-
Total	242,443	242,429

19. Commitments and contingencies

- (1) The Parent Company and LG Hausys Ltd. are jointly liable for the obligations outstanding as of April 1, 2009, the spin-off date.
- (2) As of December 31, 2014, the Parent Company has been provided with guarantees from the Seoul Guarantee Insurance for the execution of supply contracts.
- (3) As of December 31, 2014, 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, 2014, the Parent Company and certain overseas subsidiaries have the following specific line of credit agreements with several financial institutions. The Group also entered into credit line agreements with other financial institutions relating to trade finance and import/export amounting to ₩220,000 million and US\$ 425 million.

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

Classification	The Parent Company		Certain Overseas Subsidiaries				
	KRW	USD	USD	CNY	EUR	INR	PLN
Limit of bank overdraft	64,000	50	195	300	30	645	32
Limit of the letter of credit	64,000	374	57	-	-	175	-
Limit of discount of notes from export	-	1,409	-	-	-	-	-
Limit of guaranteed payments in other foreign currency	-	109	-	-	-	-	-
Limit of loan arrangements	-	-	1,411	2,480	3	2,449	-

- (5) As of December 31, 2014, the Parent Company has B2B purchase arrangements with several financial institutions amounting to ₩300,000 million.
- (6) As of December 31, 2014, the Parent Company and certain overseas subsidiaries have been named as a plaintiff in five and 33 legal actions involving ₩1,737 million and ₩4,660 million in claims, respectively, and as a defendant in four and a legal actions with ₩1,538 million and ₩95 million in claims, respectively. The ultimate outcome of these cases cannot be determined

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at the reporting date.

- (7) As of December 31, 2014, 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, 2014, the Parent Company has technology license agreements with STYRON EUROPE GmbH and other companies for the production of Polycarbonate products. Further, the Parent 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 Group manufactures and sells, and on the services the Group provides in relation to its business.
- (10) As of December 31, 2014, the Parent Company has a long-term purchase contract for certain raw materials and the supplier has made US\$ 152 million and US\$ 70 million of credit guarantee contract with financial institutions. Further, as of December 31, 2014, the Parent Company has a contract of US\$ 1 million guarantees with financial institutions in regard to a delivery commitment for certain products and the Parent Company has a contract of US\$ 90 million in guarantees with financial institutions for advances received from customers.
- (11) As of December 31, 2014, 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, 2014, amounts to US\$ 175 million and EUR 3 million (total equivalent to ₩196,370 million) (2013: US\$ 215 million, EUR 3 million and PLN 52 million, total equivalent to ₩250,066 million). Details of guarantees provided as of December 31, 2014 and 2013, are as follows:

(in millions of Korean won)

Guarantor	Guarantee beneficiary	Guarantee period	Financial institution	December 31, 2014	
				Amount of guarantee	Outstanding loan amount
The Parent Company	LG NanoH2O, Inc.	2014.10.01 ~ 2015.09.30	Citibank	32,976	7,694
	LG Chem Europe GmbH	2014.01.02 ~ 2015.01.02	Shinhan Bank	4,010	-
	LG Chem Michigan, Inc.	2014.05.27 ~ 2017.05.27	Mizuho Bank	65,952	65,952
	"	2014.03.31 ~ 2017.03.31	SMBC	43,968	21,984
	"	2013.11.18 ~ 2016.11.16	JP Morgan	27,480	27,480
	"	2014.08.18 ~ 2015.08.18	Wells Fargo	21,984	21,984
Total				196,370	145,094

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Guarantor	Guarantee beneficiary	Guarantee period	Financial institution	December 31, 2013	
				Amount of guarantee	Outstanding loan amount
The Parent Company	LG Chem (Nanjing) Information & Electronics Materials Co., Ltd.	-	HSBC	63,684	63,684
	"	-	Bank of America	31,842	31,842
	LG Chem Poland Sp. z o.o.	-	Nordea Bank	18,258	8,206
	LG Chem Europe GmbH	2014.01.02 ~ 2015.01.02	Shinhan Bank	4,369	-
	LG Chem Michigan, Inc.	2014.05.27 ~ 2017.05.27	Mizuho Bank	63,318	63,318
	"	2014.03.31 ~ 2017.03.31	SMBC	21,106	21,106
	"	2013.11.18 ~ 2016.11.16	JP Morgan	47,489	47,489
	Total			250,066	235,645

In addition, the Group provides Letter of Comfort (LOC) in relation to certain borrowings of subsidiaries.

Further, as of December 31, 2014, the Group provided no financial guarantee to its associates in relation to their borrowings.

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

(in millions of Korean won)	December 31, 2014	December 31, 2013
Property, plant and equipment	478,304	317,086

20. Equity

Changes in share capital and share premium are as follows:

(in millions of Korean won)	Ordinary shares		Preferred shares		Share premium
	Number of shares	Amount	Number of shares	Amount	
January 1, 2013	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
December 31, 2014	66,271,100	331,356	7,628,921	38,144	897,424

Changes in treasury shares are as follows:

(in millions of Korean won)	Number of shares		Carrying amount	Gain on sale of treasury shares
	Ordinary shares	Preferred shares		
January 1, 2013	359,790	5,519	15,484	13,855
Purchase of treasury shares	2	-	-	-
December 31, 2013	359,792	5,519	15,484	13,855
Purchase of treasury shares	3	-	-	-
December 31, 2014	359,795	5,519	15,484	13,855

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

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21. Retained earnings

Details of retained earnings are as follows:

<i>(in millions of Korean won)</i>	December 31, 2014	December 31, 2013
Legal reserve ¹	286,864	275,601
Discretionary reserve ²	9,077,851	8,200,700
Retained earnings before appropriation	<u>1,325,890</u>	<u>1,696,331</u>
Total	<u>10,690,605</u>	<u>10,172,632</u>

¹ The Commercial Code of the Republic of Korea requires the Parent Company to appropriate for each financial period, as a legal reserve, an amount equal to a minimum of 10% of cash dividends paid until such reserve equals 50% of its issued capital stock. The reserve is not available for cash dividends payment, but may be transferred to capital stock or used to reduce accumulated deficit. When the accumulated legal reserves (the sum of capital reserves and earned profit reserves) are greater than 1.5 times the paid-in capital amount, the excess legal reserves may be distributed in accordance with a resolution of the shareholders' meeting.

² Pursuant to the Special Tax Treatment Control Law, the Group 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.

22. Other components of equity

Details of other components of equity are as follows:

<i>(in millions of Korean won)</i>	December 31, 2014	December 31, 2013
Treasury shares (Note 20)	(15,484)	(15,484)
Capital transactions within the Group ¹	<u>(215)</u>	<u>(215)</u>
Total	<u>(15,699)</u>	<u>(15,699)</u>

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

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23. Selling, general and administrative expenses

Selling, general and administrative expenses for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Wages and salaries	386,421	319,119
Pension costs (Note 17)	29,237	24,523
Welfare expense	81,809	75,903
Travel expense	35,191	35,526
Water & utilities	25,139	24,329
Packaging expense	5,619	6,704
Rental expense	102,328	92,924
Commission expense	225,284	215,038
Depreciation (Note 12)	67,447	60,465
Advertising expense	16,796	16,175
Freight expense	430,337	411,191
Training expense	12,259	12,607
Amortization (Note 13)	23,075	16,076
Sample expense	12,296	12,925
Others	239,891	242,390
Total	1,693,129	1,565,895

24. 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, 2014 and 2013, consist of:

<i>(in millions of Korean won)</i>	2014	2013
Changes in inventories	(70,084)	(58,221)
Raw materials and consumables used	14,466,020	15,554,983
Purchase of merchandise	1,305,384	948,937
Employee benefit expense (Note 25)	1,402,341	1,180,419
Advertising expense	17,936	17,367
Transportation expense	458,308	440,400
Service fees	371,751	338,263
Depreciation and amortization	1,150,224	1,045,233
Operating lease payments	58,633	50,585
Other expenses	2,106,556	1,882,602
Total	21,267,069	21,400,568

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25. Employee benefit expense

Details of employee benefit expenses for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Wages and salaries	1,166,619	997,032
Pension costs – Defined benefit plan (Note 17)	115,744	78,903
Pension costs – Defined contribution plan (Note 17)	1,486	1,263
Others	118,492	103,221
Total	1,402,341	1,180,419

26. Finance income and expense

Details of finance income and expense for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Finance income		
Interest income ¹	45,463	35,733
Dividend income	202	190
Foreign exchange gain	66,961	140,369
Gain on foreign currency translation	6,320	23,539
Gain on settlement of trading derivatives	7,389	3,589
Gain on valuation of trading derivatives	783	-
Total	127,118	203,420
Financial expense		
Interest expense ²	79,175	65,239
Foreign exchange loss	65,238	160,833
Loss on foreign exchange translations	14,965	5,052
Loss on settlement of trading derivatives	9,595	5,430
Total	168,973	236,554

¹ Details of interest income are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Bank deposits	43,916	35,062
Other loans and receivables	1,547	671
Total	45,463	35,733

² Details of interest expense are as follows:

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<i>(in millions of Korean won)</i>	2014	2013
Interest on bank overdraft and borrowings	50,660	52,278
Interest on finance lease liabilities	122	320
Interest on debentures	23,994	24,541
Other interest expenses	10,783	15,628
Capitalized interest for qualifying assets	(6,384)	(27,528)
Total	79,175	65,239

27. Other non-operating income

Details of other non-operating income for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Foreign exchange gain	322,082	323,659
Gain on foreign currency translation	35,686	17,363
Gain on disposal of property, plant and equipment	2,952	1,275
Gain on disposal of intangible assets	16	21
Others	18,405	20,033
Total	379,141	362,351

28. Other non-operating expenses

Detail of other non-operating expense for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Foreign exchange loss	338,823	317,906
Loss on foreign currency translation	27,039	17,802
Loss on disposal of property, plant and equipment	27,966	21,011
Loss on disposal of intangible assets	2,395	6,146
Impairment loss on property, plant and equipment	82,516	73,692
Impairment loss on intangible assets	684	3,231
Donations	20,050	21,400
Others	8,280	15,165
Total	507,753	476,353

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29. Income Taxes

Details of income tax expense are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Current tax on profit for the year	296,984	331,274
Adjustments in respect of prior years	42,060	(5,493)
Deferred tax - movement in temporary differences	(68,726)	21,187
Deferred tax – tax credit carryforwards	17,863	(17,153)
	<u>288,181</u>	<u>329,815</u>
Current tax charged directly to equity	17,655	868
Income tax expense	<u>305,836</u>	<u>330,683</u>

Income taxes charged directly to other comprehensive income during the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Current tax		
Remeasurements on net defined benefit liabilities	(17,655)	868
Deferred tax		
Cash flow hedges	-	(37)
Currency translation differences	1,433	467
Others	-	99
Total	<u>1,433</u>	<u>529</u>

The movements in deferred tax assets (liabilities) for the years ended December 31, 2014 and 2013, are as follows:

(in millions of Korean won)	2014					
	Increase (decrease)					Ending balance
	Beginning balance	Business combination	Profit (loss) for the year	Other comprehensive income	Exchange differences	
Defined benefit liability	89,241	-	60,922	(17,426)	2	132,739
Plan assets	(92,321)	-	(32,385)	(229)	-	(124,935)
Reserve for research and human resources development	(234,740)	-	62,920	-	-	(171,820)
Allowance for doubtful accounts	3,791	-	(2,164)	-	46	1,673
Property, plant and equipment	99,450	-	10,923	-	2,321	112,694
Intangible assets	-	(18,777)	835	-	(939)	(18,881)
Investments in subsidiaries, associates and joint ventures ¹	(7,579)	-	(2,930)	-	(1,782)	(12,291)
Accrued income	(1,123)	-	(322)	-	-	(1,445)
Others	16,984	-	(6,842)	-	65	10,207
	(126,297)	(18,777)	90,957	(17,655)	(287)	(72,059)

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Deferred tax charged directly to equity	505	-	-	1,433	-	1,938
Tax credit carryforwards	23,350	-	(17,863)	-	-	5,487
Tax loss carryforwards	5,958	-	(4,576)	-	131	1,513
Deferred income tax assets (liabilities)	(96,484)	(18,777)	68,518	(16,222)	(156)	(63,121)

(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	17,003	(593)	-	89,241
Plan assets	(62,626)	(29,420)	(275)	-	(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)	(23,945)	(868)	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)	(3,166)	(339)	(78)	(96,484)

¹ Deferred tax liabilities of ₩492 million (2013: ₩975million) for the accumulated temporary differences of ₩166,017 million (2013: ₩139,121 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)

	2014	2013
Profit before income tax	1,159,861	1,601,296
Tax calculated based on applicable tax rate ¹	313,195	377,594
Tax adjustments		
Income not subject to tax	(19,005)	(1,383)
Expenses not deductible for tax purposes	22,107	24,783
Unrecognized deferred income tax for temporary differences in the current year	4,903	7,354
Tax credit	(77,250)	(77,472)
Others	61,886	(193)
Income tax expense	305,836	330,683

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Effective tax rate(income tax expense/ profit before income tax)	26.37%	20.65%
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¹ The weighted average applicable tax rate on profit before income tax for the year ended December 31, 2014, is 27.00% (2013: 23.58%).

Realization of the future tax benefits related to the deferred tax assets is dependent on many factors, including the Parent 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 Group did not recognize deferred income tax assets of ₩34,358 million (2013: ₩29,228 million) for the tax loss carryforwards of ₩108,164 million (2013: ₩95,921million).

The expiration of tax loss carryforwards is as follows:

<i>(in millions of Korean won)</i>	2014	2013
2017	39,021	38,421
2018	400	394
2019	1,333	1,333
2033	71,470	41,519

30. 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, 2014 and 2013, is computed as follows:

<i>(in millions of Korean won, except per share)</i>	2014	2013
Profit attributable to ordinary shares ¹	777,603	1,134,381
Weighted average number of ordinary shares outstanding ²	65,911,308	65,911,310
Basic earnings per ordinary share <i>(in won)</i>	11,798	17,211
<i>(in millions of Korean won)</i>	2014	2013
Profit attributable to preferred shares ¹	90,321	131,587
Weighted average number of preferred shares outstanding ²	7,623,402	7,623,402
Basic earnings per preferred share <i>(in won)</i>	11,848	17,261

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

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(in millions of Korean won)

	2014	2013
Profit for the year attributable to owners of the Parent Company	867,924	1,265,968
Ordinary shares dividends (A)	263,645	263,645
Preferred shares dividends (B)	30,875	30,875
Undistributed earnings for the year	573,404	971,448
Undistributed earnings available for ordinary shares (C)	513,958	870,736
Undistributed earnings available for preferred shares (D)	59,446	100,712
Profit for the year attributable to ordinary shares (A+C)	777,603	1,134,381
Profit for the year attributable to preferred shares (B+D)	90,321	131,587

² Weighted average numbers of shares are calculated as follows:

2014				
Ordinary shares	Period	Number of shares	Number of days	Number of shares x days
Beginning balance	2014. 1. 1 ~ 2014.12.31	65,911,308	365	24,057,627,420
Purchase of treasury shares	2014.12.31 ~ 2014.12.31	(3)	1	(3)
Total				24,057,627,417

Weighted average number of ordinary shares outstanding: 24,057,627,417 / 365 = 65,911,308 shares

2014				
Preferred shares	Period	Number of shares	Number of days	Number of shares x days
Beginning	2014. 1. 1 ~ 2014.12.31	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

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

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.

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31. Dividends

Details of dividends are as follows:

	2014	2013
Number of shares entitled to dividends: shares issued and outstanding (par value per share: ₩5,000)		
Ordinary shares	65,911,305	65,911,308
Preferred shares	7,623,402	7,623,402
Dividend per share (<i>in won</i>)		
Ordinary shares: cash	4,000 (80%)	4,000 (80%)
Preferred shares: cash	4,050 (81%)	4,050 (81%)
Cash dividends to distribute (<i>in millions of Korean won</i>)		
Ordinary shares	263,645	263,645
Preferred shares	30,875	30,875
	<u>294,520</u>	<u>294,520</u>

Dividend payout ratios for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Dividends (A)	294,520	294,520
Profit for the year attributable to owners of the Parent Company (B)	867,924	1,265,968
Dividend payout ratio (A/B)	<u>33.93%</u>	<u>23.26%</u>

Dividend yield ratios for the years ended December 31, 2014 and 2013, are as follows:

	2014		2013	
<i>(in Korean won)</i>	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	186,250	144,375	293,875	153,875
Dividend yield ratio (A/B)	<u>2.15%</u>	<u>2.81%</u>	<u>1.36%</u>	<u>2.63%</u>

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.

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32. Related party transactions

As of December 31, 2014 and 2013, LG Corp. is an entity exercising significant influence over the Group which owns 33.53% of the Parent Company's ordinary shares.

Details of associates and other related parties that have sales and other transactions with the Group or have receivables and payables balances as of December 31, 2014 and 2013, are as follows, and the 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.	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.

Sales and purchases with related parties for the years ended December 31, 2014 and 2013, are as follows:

(in millions of Korean won)

	2014			
	Sales and others	Purchase of raw material /merchandise	Purchase and others	
			Acquisition of property, plant and equipment and intangible assets	Others
Entities with significant influence over the Group				
LG Corp.	12	-	-	54,191
Associates and joint ventures				
SEETEC Co., Ltd.	58,671	175,822	10	78,008
TECWIN Co., Ltd.	-	378	2,218	32
HL Greenpower Co., Ltd.	80,184	-	-	-
Others	35	-	-	1,371
Other related parties				
LG MMA Corporation	124,087	140,086	-	-
SERVEONE and its subsidiaries	24,382	378,916	212,269	92,212
LG CNS Co., Ltd. and its subsidiaries	5,469	6,647	79,676	49,721
Others	235	-	-	9,270
Key management	-	-	-	40,650
Total	293,075	701,849	294,173	325,455

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	2013			
	Purchase and others			
	Sales and others	Purchase of raw material /merchandise	Acquisition of property, plant and equipment and intangible assets	Others
Entities with significant influence over the Group				
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				
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

Balances of receivables and payables arising from sales and purchases of goods and services as of December 31, 2014 and 2013, are as follows:

(in millions of Korean won)

	2014			
	Receivables			
	Trade receivables and others	Loans receivable	Other receivables	Total
Entities with significant influence over the Group				
LG Corp.	-	-	8,167	8,167
Associates and joint ventures				
HL Greenpower Co., Ltd.	18,402	-	-	18,402
Others	-	-	15	15
Other related parties				
LG MMA Corporation	8,398	-	422	8,820
SERVEONE and its subsidiaries	2,872	-	25,903	28,775
LG CNS Co., Ltd. and its subsidiaries	3,435	-	-	3,435
Others	-	-	3,724	3,724
Total	33,107	-	38,231	71,338

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(in millions of Korean won)

	2014			
	Payables			
	Trade payables	Borrowings	Other payables	Total
Entities with significant influence over the Group				
LG Corp.	-	-	7	7
Associates and joint ventures				
SEETEC Co., Ltd.	-	-	24,310	24,310
TECWIN Co., Ltd.	-	-	886	886
Other related parties				
LG MMA Corporation	10,377	-	-	10,377
SERVEONE and its subsidiaries	1,130	-	179,168	180,298
LG CNS Co., Ltd. and its subsidiaries	175	-	31,055	31,230
Others	-	-	344	344
Key management	-	-	45,751	45,751
Total	11,682	-	281,521	293,203

(in millions of Korean won)

	2013			
	Receivables			
	Trade receivables and others	Loans receivable	Other receivables	Total
Entities with significant influence over the Group				
LG Corp.	-	-	6,935	6,935
Associates and joint ventures				
HL Greenpower Co., Ltd.	11,440	-	-	11,440
Others	22	-	-	22
Other related parties				
LG MMA Corporation	14,864	-	428	15,292
SERVEONE and its subsidiaries	2,395	-	25,857	28,252
LG CNS Co., Ltd. and its subsidiaries	2,755	-	-	2,755
Others	51	-	3,724	3,775
Total	31,527	-	36,944	68,471

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(in millions of Korean won)

	2013			
	Payables			
	Trade payables	Borrowings	Other payables	Total
Entities with significant influence over the Group				
LG Corp.	-	-	64	64
Associates and joint ventures				
SEETEC Co., Ltd.	-	-	21,135	21,135
TECWIN Co., Ltd.	-	-	1,719	1,719
HL Greenpower Co., Ltd.	-	-	89	89
Others	-	-	56	56
Other related parties				
LG MMA Corporation	12,607	-	117	12,724
SERVEONE and its subsidiaries	1,218	-	173,397	174,615
LG CNS Co., Ltd. and its subsidiaries	200	-	29,350	29,550
Others	-	-	674	674
Key management	-	-	45,447	45,447
Total	14,025	-	272,048	286,073

Fund transactions with related parties for the years ended December 31, 2014 and 2013, are as follows:

(in millions of Korean won)

	Equity contributions in cash	
	2014	2013
Associates and joint ventures		
LG Fuel Cell Systems Inc.	8,402	6,419
KLPE Limited Liability Partnership	33,533	18,680
LG Chem BRASIL INTERMEDICAO DE NEGOCIOS DO SETOR QUIMCO LTDA.	-	321
Total	41,935	25,420

Compensation for key management of the Company for the years ended December 31, 2014 and 2013, consists of:

(in millions of Korean won)

	2014	2013
Wages and salaries	38,505	38,703
Pension costs	2,145	2,188
Total	40,650	40,891

Key management includes directors and audit committee members having duties and responsibilities over planning, operations and controlling of the Group'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 year.

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Details of the guarantees provided by the Parent Company for related parties at the reporting date are disclosed in Note 19.

33. Cash generated from operations

Reconciliation between operating profit and net cash inflow (outflow) from operating activities for the years ended December 31, 2014 and 2013, is as follows:

<i>(in millions of Korean won)</i>	2014	2013
Profit before income tax	1,159,861	1,601,296
Adjustments for:		
Depreciation	1,117,621	1,021,218
Amortization	32,603	24,015
Pension costs	115,744	78,903
Finance income	(88,826)	(80,242)
Financial expense	128,366	94,337
Foreign exchange differences	28,771	(22,841)
Gain on disposal of property, plant and equipment	(2,952)	(1,275)
Loss on disposal of property, plant and equipment	27,966	21,011
Impairment loss on property, plant and equipment	82,516	73,692
Gain on disposal of intangible assets	(16)	(21)
Loss on disposal of intangible assets	2,395	6,146
Impairment loss on intangible assets	684	3,231
Other expenses	(7,581)	29,139
Inventories	(146,102)	47,103
Trade receivables	7,201	(113,873)
Other receivables	(53,801)	5,175
Settlement of derivatives	(2,206)	511
Trade payables	56,460	(245,246)
Other payables	189,866	165,154
Defined benefit liability	(154,041)	(137,626)
Other cash flows from operations	(64,068)	(8,064)
Cash generated from operations	2,430,461	2,561,743

The principal non-cash transactions for the years ended December 31, 2014 and 2013, are as follows:

<i>(in millions of Korean won)</i>	2014	2013
Transfer of construction-in-progress	1,296,143	1,881,596
Transfer of machinery-in-transit	179,862	206,713
Reclassification of long-term borrowings into current maturities	455,872	487,190
Transfer to non-current assets held for sale	5,961	-
Gain on valuation of derivatives recognized as other comprehensive income	-	154

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34. Segment information

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

Segment	Products or services	Major customers
Petrochemicals	PE, PVC, VCM, Alcohol, Plasticizer, ABS/PS, EPS, MBS, SBL, EP, Ethylene, Propylene, BPA and others	LG International Corp., LG Electronics Inc., Dongbu Daewoo Electronics Corp., National Plastic Co. Ltd., Youl Chon Chemical Co. Ltd., OCI Company Co. Ltd., Mitsui & Co. Ltd., and others
IT & Electronic materials	Polarizers, 3D FPR and others	LG Display Co., Ltd. BOE, AUO, and others
Energy solutions	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, 2014 and 2013, is as follows:

(in millions of Korean won)

	2014				
	Petro - Chemicals	Information & Electronic Materials	Batteries	Common and others ³	Total
Total segment revenue	17,264,522	2,807,422	2,852,627	11,236	22,935,807
Inter-segment revenue	184,168	150,152	16,873	6,784	357,977
Revenue from external customers ¹	17,080,354	2,657,270	2,835,754	4,452	22,577,830
Operating profit (loss) ²	1,117,308	158,112	64,858	(29,517)	1,310,761

(in millions of Korean won)

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

¹ Revenue from external customers consists of sales of goods. Interest income and dividend income are included in finance income.

² Management assesses the performance of the operating segments based on a measure of operating profit of segment.

³ Common and other segments include operating segments not qualifying as a reportable segment, supporting divisions as well as R&D divisions.

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(3) The segment information on assets and liabilities as of December 31, 2014 and 2013, is as follows:

(in millions of Korean won)	2014				
	Petro - Chemicals	Information & Electronic Materials	Batteries	Common and others	Total
Total assets for the segment ¹	8,900,235	3,031,563	3,365,403	2,830,445	18,127,646
Investments in associates and joint ventures	207,539	-	17,815	264,096	489,450
Total liabilities for the segment ¹	2,616,982	595,419	1,467,896	1,181,497	5,861,794

(in millions of Korean won)	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	182,571	-	16,746	248,550	447,867
Total liabilities for the segment ¹	2,542,105	574,215	1,304,868	1,299,614	5,720,802

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 for the years ended December 31, 2014 and 2013, are as follows:

(in millions of Korean won)	Sales		Non-current assets ¹	
	2014	2013	2014	2013
Korea ²	9,290,574	9,900,642	7,672,555	7,525,988
China	9,867,315	10,189,292	1,360,890	1,264,950
South East Asia	1,434,708	1,359,226	9,209	8,275
America	1,937,372	1,734,935	404,631	169,067
Western Europe	1,586,841	1,231,345	26,322	29,468
Others	2,954,486	3,048,229	217	-
Eliminations	(4,493,466)	(4,320,057)	(249,269)	(175,046)
Total	22,577,830	23,143,612	9,224,556	8,822,702

¹ Represents aggregate amount of property, plant and equipment and intangible assets

² 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, 2014 and 2013.

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35. Business combination

(1) During the year, the Group acquired 100% interest in LG NanoH2O Inc. (formerly NanoH2O Inc.), which produces water purification filter and is located in the United States. As a result of the merger, the Group expects revenue growth through market diversification, which includes entering into new industrial markets.

(2) Goodwill amounting to ₩167,169 million arising from the business combination is due to acquisition of LG NanoH2O Inc.'s pre-existing customer base and the revenue growth generated by combining the operations of the Group and LG NanoH2O Inc.

(3) The following table summarizes the consideration paid for LG NanoH2O Inc., the fair value of assets acquired and liabilities assumed at the acquisition date:

<i>(in millions of Korean won)</i>	Amount
Consideration	
Cash and cash equivalents	<u>151,411</u>
Recognized amounts of identifiable assets acquired and liabilities assumed	
Cash and cash equivalents	14,993
Property, plant and equipment	11,630
Intangible assets	43,751
Inventories	2,243
Trade and other(non-current) receivables	8,229
Trade and other(non-current) payables	(5,608)
Borrowings	(72,219)
Deferred income tax liabilities	<u>(18,777)</u>
Total identifiable net assets	(15,758)
Goodwill	<u>167,169</u>
Total	<u>151,411</u>

(4) During the business combination process, the Parent Company provided USD 70,000 thousand as working capital loans and LG NanoH2O Inc. recognized the corresponding amount as borrowings.

(5) The fair value of trade and other (non-current) receivables is ₩8,229 million and includes trade receivables with a fair value of ₩790 million. The gross contractual amount for trade and other(non-current) receivables due is ₩8,229 million, that are all collected except for other(non-current) receivables amounting to ₩1,229 million at the reporting date.

(6) The Group has entered into performance incentive agreements with certain employees of LG NanoH2O. In order to guarantee the agreements, the Group has entered into an escrow agreement with a financial institution and deposited other non-current receivables of USD 6,369 thousand. During the year, certain performance incentives were paid and other (non-current) receivables amounting to USD 513 thousands are deposited at the reporting date.

(7) The revenue and loss included in the consolidated statement of income since the acquisition date, contributed by LG NanoH2O Inc. were ₩4,452 million and ₩26,187 million, respectively.

(8) Had LG NanoH2O Inc. been consolidated from January 1, 2014, the consolidated statement of income would show revenue of ₩5,612 million and loss of ₩66,088 million.

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36. Non-current assets held for sale

The Group decided to sell certain property, plant and equipment, and intangible assets related to the toner division with the approval of the management on June 25, 2014. The related assets were reclassified as non-current assets held for sale. The disposal is expected to be completed by first quarter of 2015.

Details of assets of disposal group classified as held-for-sale as of December 31, 2014, are as follows:

<i>(in millions of Korean won)</i>	Amount
Assets of disposal group	
Property, plant and equipment	5,899
Intangible assets	62
Total	5,961

(2) Assets of the disposal group were measured at fair value immediately before the initial classification of the assets as held for sale; the related impairment loss amounting ₩7,044 million was recognized as other non-operating expenses.

37. Approval of financial statements

The issuance of the December 31, 2014 consolidated financial statements of the Group was approved by the Board of Directors on January 26, 2015, which is subject to change with approval of shareholders at the annual shareholders' meeting.