

LG Display Co., Ltd.  
Form 20-F  
April 27, 2018  
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As filed with the Securities and Exchange Commission on April 27, 2018

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, D.C. 20549**

**FORM 20-F**

**(Mark One)**

**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES  
EXCHANGE ACT OF 1934**

**OR**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT  
OF 1934**

**For the fiscal year ended December 31, 2017**

**OR**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934**

**OR**

**SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report \_\_\_\_\_

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-32238

**LG Display Co., Ltd.**

(Exact name of Registrant as specified in its charter)

**LG Display Co., Ltd.**

(Translation of Registrant's name into English)

**The Republic of Korea**

(Jurisdiction of incorporation or organization)

**LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea**

(Address of principal executive offices)

**Daniel Kim**

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**Telephone No.: +82-2-3777-1010**

**Facsimile No.: +82-2-3777-0785**

(Name, telephone, e-mail and/or facsimile number and address of company contact person)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

**Title of each class**  
**American Depositary Shares, each representing**  
**one-half**

**Name of each exchange on which registered**  
**New York Stock Exchange**

**of one share of Common Stock**

**Common Stock, par value ₩5,000 per share**

**New York Stock Exchange\***

**\* Not for trading, but only in connection with the registration of the American Depositary Shares.  
Securities registered or to be registered pursuant to Section 12(g) of the Act.**

**None**

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.**

**None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

**357,815,700 shares of common stock, par value ₩5,000 per share**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. **Yes No**

Note Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934. **Yes No**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. **Yes No**

Indicate by check mark whether the registrant has submitted electronically and posted on its Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). **Yes No**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of large accelerated filer, accelerated filer and emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer      Accelerated filer      Non-accelerated filer      Emerging growth company  
If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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The term new or revised financial accounting standard refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting  
Standards as issued by the International  
Accounting Standards Board

Other

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.    Item 17    Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).    Yes    No

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**PRESENTATION OF FINANCIAL AND OTHER INFORMATION**

In this annual report, the terms we, us, our and LG Display refer to LG Display Co., Ltd. and, unless otherwise indicated or required by context, our consolidated subsidiaries. Notwithstanding the foregoing, in the context of any legal proceedings or governmental investigations, LG Display refers to LG Display Co., Ltd. and does not include any of its subsidiaries, or any other entities or persons.

The financial statements included in this annual report are prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. As such, we make an explicit and unreserved statement of compliance with IFRS, as issued by the IASB, with respect to our consolidated financial statements as of December 31, 2016 and 2017 and for each of the years ended in the three-year period ended December 31, 2017 included in this annual report.

Unless expressly stated otherwise, all financial data included in this annual report are presented on a consolidated basis.

All references to Korean Won, ~~Won~~ or W in this annual report are to the currency of the Republic of Korea, all references to U.S. dollars or US\$ are to the currency of the United States, all references to Japanese Yen, Yen or ¥ are to the currency of Japan, all references to RMB or Chinese Renminbi are to the currency of the People's Republic of China, all references to NT\$ are to the currency of Taiwan, all references to Euro or € are to the official currency of the European Economic and Monetary Union, all references to PLN are to the currency of the Republic of Poland, all references to R\$ are to the currency of Brazil, all references to SG\$ are to the currency of Singapore, and all references to VND are to the currency of Vietnam.

Any discrepancies in any table between the totals and the sums of the amounts listed are due to rounding.

For your convenience, this annual report contains translations of Won amounts into U.S. dollars at the noon buying rate in New York City for cable transfers in Korean Won as certified by the Federal Reserve Bank of New York for customs purposes in effect on December 31, 2017, which was ₩1,067.42 = US\$1.00.



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**FORWARD-LOOKING STATEMENTS**

We have made forward-looking statements in this annual report. Our forward-looking statements contain information regarding, among other things, our financial condition, future plans and business strategy. Words such as “contemplate,” “seek to,” “anticipate,” “believe,” “estimate,” “expect,” “intend,” “plan” and similar expressions, as they relate to us, are used to identify a number of these forward-looking statements. These forward-looking statements reflect management’s present expectations and projections about future events and are not a guarantee of future performance. Although we believe that these expectations and projections are reasonable, such forward-looking statements are inherently subject to risks, uncertainties and assumptions about us, including, among other things:

the cyclical nature of our industry;

our dependence on introducing new products on a timely basis;

our dependence on growth in the demand for our products;

our ability to compete effectively;

our dependence on a select group of key customers;

our ability to successfully manage our capacity expansion and allocation in response to changing industry and market conditions;

our dependence on key personnel;

general economic and political conditions, including those related to the display panel industry;

possible disruptions in commercial activities caused by events such as natural disasters, terrorist activity and armed conflict;

fluctuations in foreign currency exchange rates; and

those other risks identified in the “Risk Factors” section of this annual report.

Except as required by law, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the events discussed in the forward-looking statements in this annual report might not occur and our

actual results could differ materially from those anticipated in these forward-looking statements.

All subsequent forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

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**PART I**

**Item 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

**Item 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**Item 3. KEY INFORMATION**

**Item 3.A. Selected Financial Data**

The selected consolidated financial data set forth below as of and for the years ended December 31, 2013, 2014, 2015, 2016 and 2017 have been derived from our consolidated financial statements and the related notes, which have been prepared under IFRS as issued by the IASB. Our audited consolidated financial statements as of December 31, 2016 and 2017 and for each of the years in the three-year period ended December 31, 2017 and the related notes are included in this annual report.

The information set forth below is not necessarily indicative of the results of future operations and should be read in conjunction with Item 5. Operating and Financial Review and Prospects and our consolidated financial statements and related notes included in this annual report.

In addition to preparing financial statements in accordance with IFRS as issued by the IASB included in this annual report, we also prepare financial statements in accordance with Korean International Financial Reporting Standards, or K-IFRS, as adopted by the Korean Accounting Standards Board, or KASB, which we are required to file with the Financial Services Commission and the Korea Exchange under the Financial Investment Services and Capital Markets Act of Korea. See Item 10.B. Memorandum and Articles of Association Business Report. English translations of such financial statements are furnished to the SEC on Form 6-K, which are not incorporated by reference to this or any of our previous annual reports on Form 20-F. The operating profit or loss presented in the consolidated statements of comprehensive income or loss prepared in accordance with K-IFRS for the years ended December 31, 2016 and 2017 included in the Form 6-K furnished to the SEC on February 28, 2018 is a profit of ₩1,311 billion and ₩2,462 billion, respectively. For further information, please see the Form 6-K furnished to the SEC on February 28, 2018, which is not incorporated by reference to this annual report.

Pursuant to the IFRS as issued by IASB, we are not required to separately present operating profit or loss in our consolidated statements of comprehensive income or loss prepared in accordance with IFRS. Therefore, the financial statements included in this annual report, which are prepared in accordance with IFRS as issued by IASB, do not present operating profit or loss as a separate line item.

**Consolidated statements of comprehensive income data**

	2013	2014	Year ended December 31,			2017 <sup>(1)</sup>	
			2015	2016	2017	(in millions of US\$, except for per share data)	
	(in billions of Won, except for per share data)						
Revenue	₩ 27,033	₩ 26,456	₩ 28,384	₩ 26,504	₩ 27,790	US\$	26,035
Cost of sales	(23,525)	(22,667)	(24,070)	(22,754)	(22,425)		(21,009)
Gross profit	3,508	3,789	4,314	3,750	5,366		5,027
Selling expenses	(732)	(747)	(878)	(695)	(994)		(931)
Administrative expenses	(518)	(520)	(593)	(610)	(696)		(652)
Research and development expenses	(1,096)	(1,164)	(1,218)	(1,134)	(1,213)		(1,136)
Profit before income tax	830	1,242	1,434	1,316	2,333		2,186
Income tax expense	(411)	(325)	(411)	(385)	(396)		(371)
Profit for the year	419	917	1,023	931	1,937		1,815
Total comprehensive income for the year	397	843	1,003	953	1,700		1,593
Basic earnings per share (Won, US\$)	₩ 1,191	₩ 2,527	₩ 2,701	₩ 2,534	₩ 5,038	US\$	4.72
Diluted earnings per share (Won, US\$)	₩ 1,191	₩ 2,527	₩ 2,701	₩ 2,534	₩ 5,038	US\$	4.72

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	2013	2014	As of December 31,			2017	2017 <sup>(1)</sup>
			2015	2016			
	(in billions of Won)			(in millions of US\$)			
Cash and cash equivalents	₩ 1,022	₩ 890	₩ 752	₩ 1,559	₩ 2,603	US\$ 2,439	
Deposits in banks	1,302	1,526	1,772	1,164	758	710	
Trade accounts and notes receivable, net	3,129	3,444	4,098	4,958	4,325	4,052	
Inventories	1,933	2,754	2,352	2,288	2,350	2,202	
Total current assets	7,732	9,241	9,532	10,484	10,474	9,813	
Property, plant and equipment, net	11,808	11,403	10,546	12,031	16,202	15,179	
Total assets	21,715	22,967	22,577	24,884	29,160	27,318	
Trade accounts and notes payable	3,000	3,392	2,765	2,877	2,875	2,693	
Current financial liabilities	908	968	1,416	668	1,453	1,361	
Other accounts payable	1,454	1,508	1,500	2,450	3,170	2,970	
Total current liabilities	6,789	7,550	6,607	7,058	8,979	8,412	
Non-current financial liabilities	2,995	3,279	2,808	4,111	4,150	3,888	
Long-term advance received	427				830	778	
Total liabilities	10,918	11,184	9,872	11,422	14,718	13,282	
Share capital and share premium	4,040	4,040	4,040	4,040	4,040	3,785	
Retained earnings	6,663	7,455	8,159	9,004	10,622	9,951	
Total equity	10,797	11,783	12,705	13,462	14,982	14,036	

**Other financial data**

	2013	2014	Year ended December 31,			2017	2017 <sup>(1)</sup>
			2015	2016			
	(in billions of Won, except for percentages and per share data)			(in millions of US\$, except for percentages and per share data)			
Gross margin <sup>(2)</sup>	13.0%	14.3%	15.2%	14.1%	19.3%	19.3%	
Net margin <sup>(3)</sup>	1.5%	3.5%	3.6%	3.5%	7.0%	7.0%	
EBITDA <sup>(4)</sup>	₩ 4,784	₩ 4,795	₩ 4,880	₩ 4,410	₩ 5,579	US\$ 5,227	
Capital expenditures	3,473	2,983	2,365	3,736	6,592	6,176	
Depreciation and amortization <sup>(5)</sup>	3,834	3,492	3,376	3,022	3,215	3,012	
Net cash provided by operating activities	3,585	2,865	2,727	3,641	6,764	6,338	
	(4,504)	(3,451)	(2,732)	(3,189)	(6,481)	(6,073)	

Net cash used in investing activities							
Net cash provided by (used in) financing activities	(391)	405	(174)	308	862		808
Dividends declared per share (Won, US\$) <sup>(6)</sup>		₩ 500	₩ 500	₩ 500	₩ 500	US\$	0.47

- (1) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of ₩1,067.42 to US\$1.00, the noon buying rate in effect on December 31, 2017 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.
- (2) Gross margin represents gross profit divided by revenue.
- (3) Net margin represents profit (loss) for the year divided by revenue.
- (4) EBITDA is defined as profit (loss) for the year excluding interest expense, income tax expense, depreciation and amortization of intangible assets and interest income. EBITDA is a key financial measure used by our senior management to internally evaluate the performance of our business and for other required or discretionary purposes. Specifically, our significant capital assets are in different stages of depreciation, and because we do not have separate operating divisions, our senior management uses EBITDA internally to measure the performance of these assets on a comparable basis. We also believe that the presentation of EBITDA will enhance an investor's understanding of our operating performance as we believe it is commonly reported and widely used by analysts and investors in our industry. It also provides useful information for comparison on a more comparable basis of our operating performance and those of our competitors, who follow different accounting policies. For example, depreciation on most of our equipment is made based on a four-year useful life while most of our competitors use different depreciation schedules from our own. EBITDA is not a measure determined in accordance with IFRS. EBITDA should not be considered as an alternative to gross profit, cash flows from operating activities or profit (loss) for the year, as determined in accordance with IFRS. Our calculation of EBITDA may not be comparable to similarly titled measures reported by other companies. A reconciliation of profit (loss) for the year to EBITDA is as follows:

	Year ended December 31,					2017 <sup>(1)</sup>	
	2013	2014	2015	2016	2017	(in millions of US\$)	
	(in billions of Won)						
<b>Profit for the year</b>	₩ 419	₩ 917	₩ 1,023	₩ 931	₩ 1,937	US\$	1,815
Interest income	(39)	(49)	(57)	(42)	(60)		(56)
Interest expense	159	110	128	115	91		85
Income tax expense	411	325	411	385	396		371
Depreciation	3,598	3,222	2,969	2,643	2,792		2,616
Amortization of intangible assets	236	270	406	378	423		396
<b>EBITDA</b>	<b>₩ 4,784</b>	<b>₩ 4,795</b>	<b>₩ 4,880</b>	<b>₩ 4,410</b>	<b>₩ 5,579</b>	<b>US\$</b>	<b>5,227</b>

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(5) Includes amortization of intangible assets.

(6) Dividends declared per share represent cash dividends declared for the year divided by outstanding shares of common stock as of December 31.

**Operating data**

	2013	Year ended December 31,				2017
		2014	2015	2016	(in thousands)	
Number of panels sold by product category:						
Televisions	53,797	51,358	55,319	52,916	52,108	
Notebook computers <sup>(1)</sup>	55,559	50,175	45,509	39,672	26,999	
Desktop monitors <sup>(2)</sup>	49,986	43,848	41,912	40,001	37,000	
Tablet computers	63,840	50,995	31,476	24,957	26,255	
Mobile and other applications <sup>(3)</sup>	162,011	216,479	216,565	173,166	146,162	
<b>Total</b>	<b>385,193</b>	<b>412,855</b>	<b>390,781</b>	<b>330,712</b>	<b>288,524</b>	

(1) Includes semi-finished products manufactured by our former joint venture company LUCOM Display Technology (Kunshan) Ltd. through June 2014 when we disposed of our entire investment in such company.

(2) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.

(3) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.

	2013	2014	Year ended December 31,			2017 <sup>(4)</sup>	
			2015	2016	2017		
Revenue by product category:							
Televisions	₩ 11,795	₩ 10,540	₩ 10,854	₩ 10,133	₩ 11,718	US\$	10,978
Notebook computers <sup>(1)</sup>	2,819	2,669	2,509	2,384	2,244		2,102
Desktop monitors <sup>(2)</sup>	5,256	4,660	4,553	4,035	4,393		4,116
Tablet computers	3,575	3,542	2,510	2,696	2,370		2,220
Mobile and other applications <sup>(3)</sup>	3,537	5,005	7,919	7,216	7,020		6,577
<b>Total sales of goods</b>	<b>₩ 26,982</b>	<b>₩ 26,416</b>	<b>₩ 28,345</b>	<b>₩ 26,464</b>	<b>₩ 27,745</b>	<b>US\$</b>	<b>25,993</b>
Royalties	19	15	19	17	20		19
Others	32	25	20	23	25		23
<b>Revenue</b>	<b>₩ 27,033</b>	<b>₩ 26,456</b>	<b>₩ 28,384</b>	<b>₩ 26,504</b>	<b>₩ 27,790</b>	<b>US\$</b>	<b>26,035</b>

- (1) Includes semi-finished products manufactured by our former joint venture company LUCOM Display Technology (Kunshan) Ltd. through June 2014 when we disposed of our entire investment in such company.
- (2) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.
- (3) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.
- (4) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of ₩1,067.42 to US\$1.00, the noon buying rate in effect on December 31, 2017 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

### **Exchange Rates**

The table below sets forth, for the periods and dates indicated, information concerning the noon buying rate for Korean Won, expressed in Korean Won per one U.S. dollar. The noon buying rate is the rate in New York City for cable transfers in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York. Unless otherwise stated, translations of Korean Won amounts into U.S. dollars in this annual report were made at the noon buying rate in effect on December 31, 2017, which was ₩1,067.42 to US\$1.00. We do not intend to imply that the Korean Won or U.S. dollar amounts referred to herein could have been or could be converted into U.S. dollars or Korean Won, as the case may be, at any particular rate, or at all. On April 20, 2018, the noon buying rate was ₩1,071.0 = US\$1.00.



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Fluctuation in the exchange rate between the Korean Won and the U.S. dollar will affect the amount of U.S. dollars received in respect of cash dividends or other distributions paid in Korean Won by us on, and the Korean Won proceeds received from any sales of, our common stock.

<b>Year ended December 31,</b>	<b>At End of Period</b>	<b>Average Rate <sup>(1)</sup></b>	<b>High</b>	<b>Low</b>
		<b>(Korean Won per US\$1.00)</b>		
2013	₩ 1,055.3	₩ 1,094.7	₩ 1,161.3	₩ 1,050.1
2014	1,090.9	1,052.3	1,117.7	1,008.9
2015	1,169.3	1,133.7	1,196.4	1,063.0
2016	1,203.7	1,160.5	1,242.6	1,090.0
2017	1,067.4	1,121.1	1,207.2	1,067.4
October	1,115.7	1,130.9	1,146.2	1,115.7
November	1,084.8	1,099.8	1,120.0	1,079.3
December	1,067.4	1,082.9	1,094.6	1,067.4
2018 (through April 20)	1,071.0	1,070.0	1,093.0	1,054.6
January	1,068.3	1,065.6	1,073.6	1,057.6
February	1,082.1	1,078.5	1,093.0	1,065.3
March	1,061.0	1,069.9	1,081.3	1,060.3
April (through April 20)	1,071.0	1,065.2	1,071.6	1,054.6

(1) The average rate for each full year is calculated as the average of the noon buying rates on the last business day of each month during the relevant year. The average rate for a full month (or portion thereof) is calculated as the average of the noon buying rates on each business day during the relevant month (or portion thereof).

**Item 3.B. Capitalization and Indebtedness**

Not applicable.

**Item 3.C. Reasons for the Offer and Use of Proceeds**

Not applicable.

**Item 3.D. Risk Factors**

You should carefully consider the risks described below.

**Risks Relating to Our Industry**

*Our industry is subject to cyclical fluctuations, including recurring periods of capacity increases, that may adversely affect our results of operations.*

Display panel manufacturers are vulnerable to cyclical market conditions. Intense competition and expectations of growth in demand across the industry may cause display panel manufacturers to make additional investments in manufacturing capacity on similar schedules, resulting in a surge in capacity when production is ramped up at new fabrication facilities. During such surges in capacity growth, as evidenced by past experiences, customers can exert strong downward pricing pressure, resulting in sharp declines in average selling prices and significant fluctuations in the panel manufacturers' gross margins. Conversely, demand surges and fluctuations in the supply chain can lead to price increases.

From time to time, we have been affected by overcapacity in the industry relative to the general demand for display panels which, together with uncertainties in the current global economic environment, has contributed to a general decline in the average selling prices of a number of our display panel products. Our average revenue per square meter of net display area, which is derived by dividing our total revenue by total square meters of net display area shipped, decreased by 10.1% from ₩717,470 in 2015 to ₩645,222 in 2016, which was largely driven by a surge in supply capacity in the industry contributing to downward pricing pressure, but increased by 3.5% to ₩667,726 (US\$626) in 2017, primarily reflecting an increase in the proportion of higher margin products utilizing more advanced technologies in our overall product mix, coupled with the effects of a temporary surge in market demand for large-sized panels in the first half of 2017.

We attempt to counteract, at least in part, the effects of overcapacity in the industry by increasing the proportion of high margin, differentiated specialty products based on newer technologies in our product mix, which are relatively less affected by the industry-wide overcapacity problems affecting display panel products using older technologies, while also engaging in cost reduction efforts.

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While we believe that overcapacity and other cyclical issues in the industry are best addressed by increasing the proportion of high margin, differentiated specialty products based on newer technologies in our product mix that are tailored to our customers' evolving needs, we also address overcapacity issues by, in the short-term, adjusting the utilization rates of our existing fabrication facilities based on our assessment of industry inventory levels and demand for our products and, in the mid- to long-term, by fine-tuning our investment strategies relating to product development and capacity growth in light of our assessment of future market conditions.

However, we cannot provide any assurance that an increase in demand, which helped to mitigate the impact of industry-wide overcapacity in the past, can be sustained in future periods. We will therefore continue to closely monitor the overcapacity issues in the industry and respond accordingly. However, construction of new fabrication facilities and other capacity expansion projects in the display panel industry are undertaken with a multiple-year time horizon based on expectations of future market trends. Therefore, even if overcapacity issues persist in the industry, there may be continued capacity expansion in the near future due to pre-committed capacity expansion projects in the industry that were undertaken in past years. Any significant industry-wide capacity increases that are not accompanied by a sufficient increase in demand could further drive down the average selling price of our panels, which would negatively affect our gross margin. Any decline in prices may be further compounded by a seasonal weakening in demand growth for end products such as personal computer products, consumer electronics products and mobile and other application products. Furthermore, once the differentiated products that had a positive impact on our performance mature in their technology cycle, if we are not able to develop and commercialize newer products to offset the price erosion of such maturing products in a timely manner, our ability to counter the impact of cyclical market conditions on our gross margins would be further limited. We cannot provide assurance that any future downturns resulting from any large increases in capacity or other factors affecting the industry would not have a material adverse effect on our business, financial condition and results of operations.

### ***A global economic downturn may result in reduced demand for our products and adversely affect our profitability.***

In recent years, difficulties affecting the global financial sectors, adverse conditions and volatility in the worldwide credit and financial markets, fluctuations in oil and commodity prices and the general weakness of the global economy have increased the uncertainty of global economic prospects in general and have adversely affected the global and Korean economies. Global economic downturns in the past have adversely affected demand for consumer products manufactured by our customers in Korea and overseas, including televisions, notebook computers, desktop monitors, tablet computers and mobile and other application products utilizing display panels, which in turn led them to reduce or plan reductions of their production.

While global economic conditions have generally stabilized and improved in recent years, the overall prospects for the global economy remain uncertain. We cannot provide any assurance that demand for our products can be sustained at current levels in future periods or that the demand for our products will not decrease again in the future due to such economic downturns which may adversely affect our profitability. We may decide to adjust our production levels in the future subject to market demand for our products, the production outlook of the global display panel industry, in particular, the display panel industry, and global economic conditions in general. Any decline in demand for display panel products may adversely affect our business, results of operations and/or financial condition.

### ***Our industry continues to experience steady declines in the average selling prices of display panels irrespective of cyclical fluctuations in the industry, and our margins would be adversely impacted if prices decrease faster than we are able to reduce our costs.***

The average selling prices of display panels have declined in general and are expected to continually decline with time irrespective of industry-wide cyclical fluctuations as a result of, among other factors, technological advancements and

cost reductions. Although we may be able to take advantage of the higher selling prices typically associated with new products and technologies when they are first introduced in the market, such prices decline over time, and in certain cases, very rapidly, as a result of market competition or otherwise. If we are unable to effectively anticipate and counter the price erosion that accompanies our products, or if the average selling prices of our display panels decrease faster than the speed at which we are able to reduce our manufacturing costs, our gross margin would decrease and our results of operations and financial condition may be materially and adversely affected.

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***We operate in a highly competitive environment and we may not be able to sustain our current market position.***

The display panel industry is highly competitive. We have experienced pressure on the prices and margins of our major products due largely to additional capacity from panel makers in Korea, Taiwan, China and Japan. Our main competitors in the industry include Samsung Display, Innolux, AU Optronics, BOE, China Star Optoelectronics Technology, CEC Panda, HKC, JDI and Sharp.

Some of our competitors may currently, or at some point in the future, have greater financial, sales and marketing, manufacturing, research and development or technological resources than we do. In addition, our competitors may be able to manufacture panels on a larger scale or with greater cost efficiencies than we do and we anticipate increases in production capacity in the future by other display panel manufacturers using similar display panel technologies as us. Any price erosion resulting from strong global competition or additional industry capacity may materially adversely affect our financial condition and results of operations.

In addition, consolidation within the industry in which we operate may result in increased competition as the entities emerging from such consolidation may have greater financial, manufacturing, research and development and other resources than we do, especially if such mergers or consolidations result in vertical integration and operational efficiencies. For example, in August 2016, Foxconn Technology Group, an integrated electronics contract manufacturer for end-brands, acquired a majority stake in our competitor, Sharp. Increased competition resulting from such mergers or consolidations may lead to decreased margins, which may have a material adverse effect on our financial condition and results of operations.

We and our competitors each seek to establish our own products and technologies as the industry standards. For example, in the large-sized television panel market, we currently manufacture primarily 32-inch, 43-inch, 49-inch, 55-inch and 65-inch television panels and utilize white RGB, or WRGB, technology for our organic light-emitting diode, or OLED, television panels. Other display panel manufacturers produce competing large-sized television panels in slightly different dimensions and utilize competing display panel technologies. If our competitors' panels or the technologies they adopt become the market standard, we may lose market share and may not realize the expected return on our investments in the technologies we utilize in our display panels, which may have a material adverse effect on our financial condition and results of operations.

Our ability to compete successfully also depends on factors both within and outside our control, including product pricing, performance and reliability, our relationship with customers, successful and timely investment and product development, success or failure of our end-brand customers in marketing their brands and products, component and raw material supply costs, and general economic and industry conditions. We cannot provide assurance that we will be able to maintain a competitive advantage with respect to all these factors and, as a result, we may be unable to sustain our current market position.

***Our operating results fluctuate from period to period, so you should not rely on period-to-period comparisons to predict our future performance.***

Our industry is affected by market conditions that are often outside the control of manufacturers. Our results of operations may fluctuate significantly from period to period due to a number of factors, including seasonal variations in consumer demand, capacity ramp-up by competitors, industry-wide technological changes, the loss of a key customer and the postponement, rescheduling or cancellation of large orders by a key customer, any of which may or may not reflect a continued trend from one period to the next. As a result of these factors and other risks discussed in this section, you should not rely on period-to-period comparisons to predict our future performance.

**Risks Relating to Our Company**

*Our financial condition may be adversely affected if we cannot introduce new products to adapt to rapidly evolving customer needs on a timely basis.*

Our success will depend greatly on our ability to respond quickly to rapidly evolving customer requirements and to develop and efficiently manufacture new and differentiated products in anticipation of future demand. A failure or delay on our part to develop and efficiently manufacture products of such quality and technical specifications that meet our customers' evolving needs may adversely affect our business.

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Close cooperation with our customers to gain insights into their product needs and to understand general trends in the end-product market is a key component of our strategy to produce successful products. In addition, when developing new products, we often work closely with equipment suppliers to design equipment that will make our production processes for such new products more efficient. If we are unable to work together with our customers and equipment suppliers, or to sufficiently understand their respective needs and capabilities or general market trends, we may not be able to introduce or efficiently manufacture new products in a timely manner, which may have a material adverse effect on our financial situation.

In addition, product differentiation, especially the ability to develop and market differentiated specialty products that command higher premiums in a timely manner, has become a key competitive strategy in the display panel market. This is in part due to trends in consumer electronics and other markets, such as televisions, tablet computers and mobile devices, where the growth in demand is led by end products employing newer technologies with specifications tailored to deliver enhanced performance, convenience and user experience in a cost-efficient and timely manner. Accordingly, we have focused our efforts on developing and marketing differentiated specialty products, including our ultra-large and ultra-thin OLED television and public display panels, OLED television panels with built-in sound systems, dual-sided and vertical tiling OLED display panels, flexible OLED smartphone and smartwatch panels, display panels utilizing ultra-high definition, or Ultra HD, technologies, and Advanced High-Performance In-Place Switching, or AH-IPS, panels for tablet computers, mobile devices, notebook computers and desktop monitors. We have also focused our efforts on cost reductions in the production process, in particular of panels with newer technologies, such as OLED, in order to improve or maintain our profit margins while offering competitive prices to our customers.

We have developed differentiated sales and marketing strategies to promote our panels for differentiated specialty products as part of our strategy to grow our operations to meet increasing demand for new applications in consumer electronics and other markets. However, we cannot provide assurance that the differentiated products we develop and market will be responsive to our end customers' needs nor that our products will be successfully incorporated into end products or new applications that lead market growth in consumer electronics or other markets.

***Problems with product quality, including defects, in our products could result in a decrease in customers and sales, unexpected expenses and loss of market share.***

Our products are manufactured using advanced, and often new, technology and must meet stringent quality requirements. Products manufactured using advanced and new technology, such as ours, may contain undetected errors or defects, especially when first introduced. For example, our latest display panels may contain defects that are not detected until after they are shipped or installed because we cannot test for all possible scenarios. Such defects could cause us to incur significant re-designing costs, divert the attention of our technology personnel from product development efforts and significantly affect our customer relations and business reputation. In addition, future product failures could cause us to incur substantial expense to repair or replace defective products. We recognize a provision for warranty obligations based on the estimated costs that we expect to incur under our basic limited warranty for our products, which covers defective products and is normally valid for eighteen months from the date of purchase. The warranty provision is largely based on historical and anticipated rates of warranty claims, and therefore we cannot provide assurance that the provision would be sufficient to cover any surge in future warranty expenses that significantly exceed historical and anticipated rates of warranty claims. In addition, if we deliver products with errors or defects, or if there is a perception that our products contain errors or defects, our credibility and the market acceptance and sales of our products could be harmed. Widespread product failures may damage our market reputation and reduce our market share and cause our sales to decline.

***We sell our products to a select group of key customers, including our largest shareholder, and any significant decrease in their order levels will negatively affect our financial condition and results of operations.***

A substantial portion of our sales is attributable to a limited group of end-brand customers and their designated system integrators. Sales attributed to our end-brand customers are for their end-brand products and do not include sales to these customers for their system integration activities for other end-brand products, if any. Our top ten end-brand customers, including LG Electronics Inc., our largest shareholder, together accounted for approximately 82% of our sales in each of 2015 and 2016 and 81% in 2017.



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We benefit from the strong collaborative relationships we maintain with our end-brand customers by participating in the development of their products and gaining insights about levels of future demand for our products and other industry trends. Customers look to us for a dependable supply of quality products, even during downturns in the industry, and we benefit from the brand recognition of our customers' end products. The loss of these end-brand customers, as a result of their entering into strategic supplier arrangements with our competitors or otherwise, would thus result not only in reduced sales, but also in the loss of these benefits. We cannot provide assurance that a select group of key end-brand customers, including our largest shareholder, will continue to place orders with us in the future at the same levels as in prior periods, or at all.

We engage in related party transactions with LG Electronics and its affiliates:

Sales to LG Electronics – sales to LG Electronics and its subsidiaries, which include sales to LG Electronics both as an end-brand customer and a system integrator, amounted to 23.5%, 21.9% and 23.4% of our sales in 2015, 2016 and 2017, respectively.

Sales to LG International – sales to LG International Corp., our affiliated trading company, and its subsidiaries amounted to 3.5%, 2.3% and 2.6% of our sales in 2015, 2016 and 2017, respectively.

We expect that we will continue to be dependent upon LG Electronics and its affiliates for a significant portion of our revenue for the foreseeable future. See Item 7.B. Related Party Transactions for a description of these related party transactions with LG Electronics and its affiliates. Our results of operations and financial condition could therefore be affected by the overall performance of LG Electronics and its affiliates.

***Any material deterioration in the financial condition of our key end-brand customers, their system integrators or our affiliated trading company will have an adverse effect on our results of operations.***

Our top ten end-brand customers together accounted for approximately 82% of our sales in each of 2015 and 2016 and 81% in 2017. Although we negotiate directly with our end-brand customers concerning the price and quantity of the sales, for some sales transactions we invoice the end-brand customers' designated system integrators. In addition, a portion of our sales to end-brand customers and their system integrators located in certain regions are sold through our affiliated trading company, LG International and its subsidiaries. Our credit policy typically requires payment within 30 to 90 days, and payments on the vast majority of our sales have typically been collected within 60 days. Although we have not experienced any material problems relating to customer payments to date, as a result of our significant dependence on a concentrated group of end-brand customers and their designated system integrators, as well as the sales we make to our affiliated trading company and its subsidiaries, we are exposed to credit risks associated with these entities.

***Consolidation and other changes at our end-brand customers could cause sales of our products to decline.***

Mergers, acquisitions, divestments or consolidations involving our end-brand customers can present risks to our business, as management at the new entity may change the way they do business, including their transactions with us, or may decide not to use us as one of their suppliers of display panels. In addition, we cannot provide assurance that a combined entity resulting from a merger, acquisition or consolidation or a newly formed entity resulting from a divestment will continue to purchase display panels from us at the same level, if at all, as each entity purchased in the aggregate when they were separate companies or that a divested company will purchase panels from us at the same level, if at all, as prior to the divestment.

***Our results of operations depend on our ability to keep pace with changes in technology.***

Advances in technology typically lead to rapid declines in sales volumes for products made with older technologies and may lead to these products becoming less competitive in the marketplace, or even obsolete. As a result, we will likely be required to make significant expenditures to develop or acquire new process and product technologies, along with corresponding manufacturing capabilities. For example, the expanding mobile display market for smart devices such as smartphones and smartwatches has resulted in increased demand for display panels using new energy-efficient technologies that provide for greater resolutions, wider viewing angles, high light transmittance and stability of images even when used on a touchscreen device. We have introduced mobile display products based on AH-IPS, which have helped us quickly secure a leading role in this market.

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While thin-film transistor liquid crystal display, or TFT-LCD, technology undergoes continued innovation, we and our competitors are also developing new display technologies that depart from TFT-LCD technology, such as OLED technology. In particular, we and some of our competitors have already commenced mass production of OLED products. We began production of OLED panels for televisions on our E3 production lines in January 2013 and commenced mass production of OLED panels for smartphones on our E2 production lines and OLED panels for televisions on our E4 production lines in December 2013 and December 2014, respectively. In August 2017, we began production of plastic OLED panels for mobile and other applications on our newly constructed E5 production line.

With the addition of 77-inch OLED televisions to the line-up of available products in the first quarter of 2016, following the prior launch of 55-inch and 65-inch OLED televisions, we are deploying greater resources into large-sized OLED panel fabrication capabilities in order to maintain our competitive edge in the large-sized OLED television panel market. We are also deploying greater resources into small- and medium-sized OLED panels for various applications in order to expand our market presence. Our ability to develop differentiated products with new display technologies and utilize advanced manufacturing processes to increase production yields while lowering production cost will be critical to our sustained competitiveness. However, we cannot provide assurance that we will be able to continue to successfully develop new products or manufacturing processes through our research and development efforts or through obtaining technology licenses, or that we will keep pace with technological changes in the marketplace.

***Our revenue depends on continuing demand for televisions, notebook computers, desktop monitors, tablet computers and mobile and other application products with panels of the type we produce. Our sales may not grow at the rate we expect if consumers do not purchase these products.***

Currently, our total sales are derived principally from customers who use our products in televisions, notebook computers, desktop monitors, tablet computers and mobile and other application products with display devices. In particular, a substantial percentage of our sales is derived from end-brand customers, or their designated system integrators, who use our panels in their televisions, which accounted for 38.2%, 38.2% and 42.2% of our total revenue in 2015, 2016 and 2017, respectively. A substantial portion of our sales is also derived from end-brand customers, or their designated system integrators, who use our panels in their notebook computers, which accounted for 8.8%, 9.0% and 8.1% of our total revenue in 2015, 2016 and 2017, respectively, those who use our panels in their desktop monitors, which accounted for 16.0%, 15.2% and 15.8% of our total revenue in 2015, 2016 and 2017, respectively, those who use our panels in their tablet computers, which accounted for 8.8%, 10.2% and 8.5% of our total revenue in 2015, 2016 and 2017, respectively, and those who use our panels in their mobile and other applications, which accounted for 27.9%, 27.2% and 25.3% of our total revenue in 2015, 2016 and 2017, respectively. Although the degree to which our total sales are dependent on sales of television panels has fluctuated in recent years, television panels remain our largest product category in terms of revenue and we will therefore continue to be dependent on continuing demand from the television industry. In addition, we will continue to be dependent on continuing demand from the personal computer industry, the tablet computer industry and the mobile device industry for a substantial portion of our sales. Any downturn in any of those industries in which our customers operate would result in reduced demand for our products, which may in turn result in reduced revenue, lower average selling prices and/or reduced margins.

***The emergence of OLED technology as an alternative to panels with TFT-LCD technology may erode sales of our TFT-LCD panels, which may have a material adverse effect on our financial condition and results of operations.***

While our revenue and sales volume is predominantly derived from the sale of display panels with TFT-LCD technology, new display technologies, such as OLED technology, are at various stages of development and production by us and other display panel makers. OLED technology is widely seen in the display industry as a successor

technology to TFT-LCD technology and is gaining wider market acceptance for use in display panels for televisions, smartphones and tablet computers, and industrial and other applications, including public displays, entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment. We have recognized the importance and potential of OLED technology and have in recent years engaged in research and development and invested in production facilities to develop and commercialize OLED panels for small-, medium- and large-sized products. We began production of OLED panels for televisions on our E3 production lines in January 2013 and commenced mass production of OLED panels for smartphones on our E2 production lines and OLED panels for televisions on our E4 production lines in December 2013 and December 2014, respectively. In August 2017, we began production of plastic OLED panels for mobile and other applications on our newly constructed E5 production line.

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Our early efforts in developing and commercializing OLED technology were recognized by the Society for Information Display, a display panel industry group, when we were awarded the Silver Award for Display Application of the Year for our circular plastic OLED panels for smartphones and Silver Award for the Display of the Year for our 65-inch Ultra HD curved OLED panels for televisions in June 2015. We were also awarded a Best of CES Award by the Consumer Electronics Association in January 2016 and a Best in Show Award by the Society for Information Display in May 2016 for our 77-inch OLED television panels and a Best Product in EISA Award by the European Imaging and Sound Association in September 2016 for our 65-inch OLED television panels. In May 2017, we were once again awarded the Display of the Year Award by the Society for Information Display for our 65-inch wallpaper OLED television panels. While we aim to maintain our early competitive edge in the market for OLED panels, the market for OLED panels is in the early stages of development and we expect competition will intensify.

As OLED panels continue to gain market acceptance as an alternative to TFT-LCD panels, if we are unable to continue to develop and commercialize OLED technology in a commercially viable and timely manner to offset declining sales of our TFT-LCD panels, or if customers prefer panels developed and manufactured by our competitors utilizing competing types of OLED technologies, this would have a material adverse effect on our financial condition and results of operations. See also [We operate in a highly competitive environment and we may not be able to sustain our current market position.](#) [above.](#)

***We will have significant capital requirements in connection with our business strategy and if capital resources are not available we may not be able to implement our strategy and future plans.***

In connection with our strategy to further enhance the diversity and capacity of our display panel production, we estimate that we will continue to incur significant capital expenditures for the enhancement of existing production facilities, including the construction of additional, and the conversion of existing, production lines, and the construction of new production facilities. Our significant recent and pending capital expenditures include the following:

In response to and in anticipation of growing demand in the China market, in July 2017, we announced our plan to establish a joint venture with the government of Guangzhou to construct a next generation large-sized OLED production line, which is expected to commence production in the second half of 2019, at our GP fabrication facility in Guangzhou, China, and we plan to invest approximately ₩1.8 trillion to acquire a 70% ownership interest in such joint venture.

In anticipation of growing demand for OLED panels, in July 2015 and July 2016, we announced plans for our new E5 and E6 production lines, respectively. Also in July 2015, we entered into a memorandum of understanding with Gumi City and North Gyeongsang Province for their administrative assistance in connection with our investment in our new E5 production line. We have commenced mass production of plastic OLED panels on our new E5 production line beginning in August 2017 and expect to commence mass production on our new E6 production line in the second half of 2018.

In addition, in November 2015, we announced plans for the construction of our next generation P10 fabrication facility in Paju, Korea. We expect construction to be completed at the new Paju fabrication facility in the second half of 2018.

In July 2017, we announced plans to make investments in an aggregate amount of ₩7.8 trillion in a next generation large-size OLED production line and a next generation plastic OLED production line in Paju, Korea.

In April 2016, we entered into a memorandum of understanding with the City of Haiphong in Vietnam for their administrative assistance in connection with our planned ₩120 billion investment to build our new module assembly facility in Haiphong, which commenced production in July 2017.

In April 2016, we entered into another memorandum of understanding with Gumi City and North Gyeongsang Province for their administrative assistance in connection with our additional ₩450 billion investment in connection with our sixth-generation flexible OLED panel fabrication facilities as well as our new fifth-generation OLED light panel fabrication facility.

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In 2017, our total capital expenditure on a cash out basis amounted to ₩6.6 trillion. We currently expect that, in 2018, our total capital expenditures on a cash out basis will be higher than in 2017, primarily to fund the expansion of our panel production capacities for large-sized and small- and medium-sized OLED panels, including in connection with the construction of a next generation large-sized OLED production line at our GP fabrication facility in Guangzhou, China through our joint venture with the government of Guangzhou, and the construction of our P10 fabrication facility, a next generation large-size OLED production line and a next generation plastic OLED production line in Paju, Korea, while maintaining and making improvements to our existing facilities. This amount is subject to periodic assessment, and we cannot provide any assurance that this amount may not change materially after assessment.

These capital expenditures will be made well in advance of any additional sales that will be generated from these expenditures. However, in the event of adverse market conditions, or if our actual expenditures far exceed our planned expenditures, our external financing activities combined with our internal sources of liquidity may not be sufficient to carry out our current and future operational plans, and we may decide not to expand the capacity of certain of our facilities or construct new production facilities as scheduled or at all. Our ability to obtain additional financing will depend upon a number of factors outside our control, including general economic, financial, competitive, regulatory and other considerations.

In the past, difficulties affecting the global financial sectors, adverse conditions and volatility in the worldwide credit and financial markets, fluctuations in oil and commodity prices and the general weakness of the global economy have increased the uncertainty of global economic prospects in general and have adversely affected the global and Korean economies. Because we rely on financing both within and outside of Korea from time to time, difficulties affecting the global and Korean economies, including any increase in market volatility and their lingering effects, could adversely affect our ability to obtain sufficient financing on commercially reasonable terms. The failure to obtain sufficient financing on commercially reasonable terms to complete our expansion plans could delay or impair our ability to pursue our business strategy, which could materially and adversely affect our business and results of operations.

***Our manufacturing processes are complex and periodic improvements to increase efficiency can expose us to potential disruptions in operations.***

The manufacturing processes for TFT-LCD, OLED and other display products are highly complex, requiring sophisticated and costly equipment that is periodically modified and upgraded to improve manufacturing yields and product performance, and reduce unit manufacturing costs. These updates expose us to the risk that from time to time production difficulties will arise that could cause delivery delays, reduced output or both. We cannot provide assurance that we will not experience manufacturing problems in achieving acceptable output, product delivery delays or both as a result of, among other factors, construction delays, difficulties in upgrading or modifying existing production lines or building new plants, difficulties in modifying existing or adopting new manufacturing line technologies or processes or delays in equipment deliveries, any of which could constrain our capacity and adversely affect our results of operations.

***We may be unable to successfully execute our growth strategy or manage and sustain our growth on a timely basis, if at all, and, as a result, our business may be harmed.***

We have experienced, and expect to continue to experience, rapid growth in the scope and complexity of our operations due to the building of new fabrication facilities and the expansion and conversion of existing fabrication facilities to meet the evolving and anticipated demands of our customers. For example, we converted existing production lines and established our AP3 production lines and commenced mass production of low temperature polycrystalline silicon, or LTPS, based displays for mobile devices in February 2014 and invested in additional production lines and established our E4 production lines and commenced mass production of OLED panels for

televisions in December 2014. In addition, we established our E5 production lines and commenced mass production of flexible OLED panels for mobile and other applications in August 2017. See Item 4.D. Property, Plants and Equipment Current Facilities. With respect to our overseas facilities in recent years, we commenced mass production at our module production plant at our GP fabrication facility in Guangzhou, China in September 2014. In response to and in anticipation of growing demand in the China market, in July 2017, we announced our plan to establish a joint venture with the government of Guangzhou to construct a next generation large-sized OLED production line, which is expected to commence production in the second half of 2019, at our GP fabrication facility in Guangzhou, China, and we plan to invest approximately ₩1.8 trillion to acquire a 70% ownership interest in such joint venture. See also We will have significant capital requirements in connection with our business strategy and if capital resources are not available we may not be able to implement our strategy and future plans. above.



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Sustained growth in the scope and complexity of our operations may strain our managerial, financial, manufacturing and other resources. We may experience manufacturing difficulties in starting new production lines, upgrading existing facilities or building new plants as a result of cost overruns, construction delays or shortages of, or quality problems with, materials, labor or equipment, any of which could result in a loss of future revenue. We may also incur opportunity costs if we misjudge the anticipated demand for certain display panel products and allocate our limited resources in increasing production capacity for such display panel products at the cost of maintaining existing or increasing production capacity of other display panel products that turn out to be more popular. In addition, failure to keep up with our competitors in future investments in next-generation panel fabrication facilities or in the upgrading of manufacturing capacity of existing facilities would impair our ability to effectively compete within the display panel industry. Failure to obtain intended economic benefits from expansion projects could adversely affect our business, financial condition and results of operations.

***If we cannot maintain high capacity utilization rates, our profitability will be adversely affected.***

The production of display panels entails high fixed costs resulting from considerable expenditures for the construction of complex fabrication and assembly facilities and the purchase of costly equipment. We aim to maintain high capacity utilization rates so that we can allocate these fixed costs over a greater number of panels produced and realize a higher gross margin. However, due to any number of reasons, including fluctuating demand for our products or overcapacity in the display industry, we may need to reduce production, resulting in lower-than-optimal capacity utilization rates. As such, we cannot provide assurance that we will be able to sustain our capacity utilization rates in the future nor can we provide assurance that we will not reduce our utilization rates in the future as market and industry conditions change.

***Limited availability of raw materials, components and manufacturing equipment could materially and adversely affect our business, results of operations or financial condition.***

Our production operations depend on obtaining adequate supplies of quality raw materials and components on a timely basis. As a result, it is important for us to control our raw material and component costs and reduce the effects of fluctuations in price and availability. In general, we source most of our raw materials as well as key components, such as glass substrates, driver integrated circuits and polarizers used in both our TFT-LCD and OLED products, backlight units and liquid crystal materials used in our TFT-LCD products and hole transport materials and emission materials used in our OLED products, from two or more suppliers for each key component. However, we may establish a working relationship with a single supplier if we believe it is advantageous to do so due to performance, quality, support, delivery, capacity, price or other considerations. We may experience shortages in the supply of these key components, as well as other components or raw materials, as a result of, among other things, anticipated capacity expansion in the display industry or our dependence on a limited number of suppliers. Our results of operations would be adversely affected if we were unable to obtain adequate supplies of high-quality raw materials or components in a timely manner or make alternative arrangements for such supplies in a timely manner.

Furthermore, we may be limited in our ability to pass on increases in the cost of raw materials and components to our customers. We do not typically enter into binding long-term contracts with our customers, and even in those cases where we do enter into long-term agreements with certain of our major end-brand customers, the price terms are contained in the purchase orders which are generally placed by them one month in advance of delivery. Except under certain special circumstances, the price terms in the purchase orders are not subject to change. Prices for our products are generally determined through negotiations with our customers, based generally on the complexity of the product specifications and the labor and technology involved in the design or production processes. However, if we become subject to any significant increase in the cost of raw materials or components that were not anticipated when negotiating the price terms after the purchase orders have been placed, we may be unable to pass on such cost

increases to our customers.

We have purchased, and expect to purchase, a substantial portion of our equipment from a limited number of qualified foreign and local suppliers. From time to time, increased demand for new equipment may cause lead times to extend beyond those normally required by the equipment vendors. The unavailability of equipment, delays in the delivery of equipment, or the delivery of equipment that does not meet our specifications, could delay implementation of our expansion plans and impair our ability to meet customer orders. This could result in a loss of revenue and cause financial stress on our operations.

***Earthquakes, tsunamis, floods and other natural calamities could materially adversely affect our business, results of operations or financial condition.***

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If earthquakes, tsunamis, floods or any other natural calamities were to occur in the future in any area where any of our assets, suppliers or customers are located, our business, results of operations or financial condition could be adversely affected. A number of suppliers of our raw materials, components and manufacturing equipment, as well as customers of our products, are located in countries which have suffered natural calamities such as earthquakes and tsunamis in the recent past, such as Japan and Taiwan. Any occurrence of such natural calamities in Japan or any other countries where our suppliers are located may lead to shortages or delays in the supply of raw materials, components or manufacturing equipment. In addition, natural calamities in areas where our customers are located, including Japan, may cause disruptions in their businesses, which in turn could adversely impact their demand for our products.

***Purchase orders from our customers, which are placed generally one month in advance of delivery, vary in volume from period to period, and we operate with a modest inventory, which may make it difficult for us to efficiently allocate capacity on a timely basis in response to changes in demand.***

Our major customers and their designated system integrators provide us with three- to six-month rolling forecasts of their product requirements. However, firm orders are not placed until one month before delivery when negotiations on purchase prices are also finalized. Firm orders may be less than anticipated based on these three- to six-month forecasts. Due to the cyclicity of the display industry, purchase order levels from our customers have varied from period to period. Although we typically operate with a two- to four-week inventory, it may be difficult for us to adjust production costs or to allocate production capacity in a timely manner to compensate for any such volatility in order volumes. Our inability to respond quickly to changes in overall demand for display products as well as changes in product mix and specifications may result in lost revenue, which would adversely affect our results of operations.

***We may experience losses on inventories.***

Frequent new product introductions in the computer and consumer electronics industries can result in a decline in the average selling prices of our display panels and the obsolescence of our existing display panel inventory. This can result in a decrease in the stated value of our panel inventory, which we value at the lower of cost or market value.

We manage our inventory based on our customers' and our own forecasts and typically operate with a two- to four-week inventory. Although adjustments are regularly made based on market conditions, we typically deliver our goods to the customers one month after a firm order has been placed. While we maintain open channels of communication with our major customers to avoid unexpected decreases in firm orders or subsequent changes to placed orders, and try to minimize our inventory levels, such actions by our customers may have an adverse effect on our inventory management.

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***Sanctions or judgments against us and other TFT-LCD panel producers for possible anti-competitive activities may have a direct and indirect material impact on our operations.***

In December 2006, LG Display received notices of investigation by the U.S. Department of Justice, the European Commission, the Korea Fair Trade Commission and the Japan Fair Trade Commission with respect to possible anti-competitive activities in the TFT-LCD industry. Subsequently, the Competition Bureau of Canada, the Secretariat of Economic Law of Brazil, the Taiwan Fair Trade Commission and the Federal Competition Commission of Mexico announced investigations regarding the same.

In November 2008, LG Display executed an agreement with the U.S. Department of Justice whereby LG Display and LG Display America pleaded guilty to a Sherman Antitrust Act violation and agreed to pay a single total fine of US\$400 million. In December 2008, the U.S. District Court for the Northern District of California accepted the terms of the plea agreement and entered a judgment against LG Display and LG Display America and ordered the payment of US\$400 million, which has since been paid. The agreement resolved all federal criminal charges against LG Display and LG Display America in the United States in connection with this matter, provided that LG Display continues to cooperate with the U.S. Department of Justice in connection with the ongoing proceedings.

In December 2010, the European Commission issued a decision finding that LG Display engaged in anti-competitive activities in the TFT-LCD industry in violation of European Union competition laws, and imposed a fine of 215 million. In February 2011, LG Display filed with the European Union General Court an application for partial annulment and reduction of the fine imposed by the European Commission. In November 2011, LG Display received a request for information from the European Commission relating to certain alleged anti-competitive activities in the TFT-LCD industry and has responded to the request. In February 2014, the European Union General Court reduced the fine to 210 million and LG Display paid the fine in full in April 2014. In May 2014, LG Display filed an appeal with the European Court of Justice requesting annulment of the European Union General Court's judgment and further reduction of the fine imposed by the European Commission's decision, and in April 2015 the European Court of Justice upheld the decision of the European Union General Court.

In November 2009, the Taiwan Fair Trade Commission terminated its investigation without any finding of violations or levying of fines. Also, in February 2012, the Competition Bureau of Canada terminated its investigation without any finding of violations or levying of fines. In August 2014, the Japan Fair Trade Commission terminated its investigation without any finding of violations or levying of fines. In August 2014, LG Display executed a settlement agreement with the Brazilian Administrative Council for Economic Defense (CADE), for R\$33.9 million, which resolved all administrative charges against LG Display provided that it continues to cooperate with the ongoing investigation.

In December 2011, the Korea Fair Trade Commission imposed a fine of ₩31.4 billion after finding that LG Display and certain of its subsidiaries engaged in anti-competitive activities in violation of Korean fair trade laws. In December 2011, LG Display filed an appeal of the decision with the Seoul High Court. In February 2014, the Seoul High Court annulled the decision of the Korea Fair Trade Commission. In March 2014, the Korea Fair Trade Commission filed an appeal of the Seoul High Court decision with the Supreme Court of Korea. In June 2014, the Supreme Court of Korea upheld the lower court's decision.

After the commencement of the U.S. Department of Justice investigation, a number of class action complaints were filed against LG Display, LG Display America and other TFT-LCD panel manufacturers in the United States and Canada alleging violation of respective antitrust laws and related laws. In a series of decisions in 2007 and 2008, the class action lawsuits in the United States were transferred to the Northern District of California for pretrial proceedings, which we refer to as the MDL Proceedings. In March 2010, the federal district court granted the class

certification motion filed by the indirect purchaser plaintiffs, and granted in part and denied in part the class certification motion filed by the direct purchaser plaintiffs. In January 2011, 78 entities (including groups of affiliated entities) submitted requests for exclusion from the direct purchaser class. In April 2012, ten entities (including groups of affiliated companies) submitted requests for exclusion from the indirect purchaser class. In addition, since 2010, the attorneys general of Arkansas, California, Florida, Illinois, Michigan, Mississippi, Missouri, New York, Oklahoma, Oregon, South Carolina, Washington, West Virginia and Wisconsin filed complaints against LG Display, alleging similar antitrust violations as alleged in the MDL Proceedings.

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In June 2011, LG Display reached a settlement with the direct purchaser class, which the federal district court approved in December 2011. In July 2012, LG Display reached a settlement with the indirect purchaser class plaintiffs and with the state attorneys general of Arkansas, California, Florida, Michigan, Missouri, New York, West Virginia and Wisconsin, which was approved by the federal district court in April 2013 and, in the case of the state attorneys general actions, by their respective state governments. LG Display has since reached settlement with each of the attorneys general that had filed action.

In addition, in relation to the MDL Proceedings, in 2009, ATS Claim, LLC (assignee of Ricoh Electronics, Inc.), AT&T Corp. and its affiliates, Motorola Mobility, Inc. ( Motorola ), and Electrograph Technologies Corp. and its subsidiary filed separate claims in the United States, and all of the actions were subsequently consolidated into the MDL Proceedings. In 2010, TracFone Wireless Inc., Best Buy Co., Inc. and its affiliates, Target Corp., Sears, Roebuck and Co., Kmart Corp., Old Comp Inc., Good Guys, Inc., RadioShack Corp., Newegg Inc., Costco Wholesale Corp., Sony Electronics, Inc. and its affiliate, SB Liquidation Trust and the trustee of the Circuit City Stores, Inc. Liquidation Trust filed separate claims in the United States. In 2011, the AASI Creditor Liquidating Trust on behalf of All American Semiconductor Inc., CompuCom Systems, Inc., Interbond Corporation of America, Jaco Electronics, Inc., Office Depot, Inc., P.C. Richard & Son Long Island Corporation, MARTA Cooperative of America, Inc., ABC Appliance, Inc., Schultze Agency Services, LLC on behalf of Tweeter Opco, LLC and its affiliate, T-Mobile U.S.A., Inc., Tech Data Corporation and its affiliate filed similar claims in the United States. In 2012, ViewSonic Corp., NECO Alliance LLC, Rockwell Automation LLC, Proview Technology Inc. and its affiliates filed similar claims. In November 2013, Acer America Corporation and its affiliates filed similar claims in the United States. The cases were transferred to the MDL Proceedings for pretrial proceedings. In December 2012, Sony Europe Limited and its affiliate filed similar claims in the High Court of Justice in the United Kingdom. In July 2015, LG Display was dismissed from the Motorola case and as of April 25, 2018, LG Display has reached settlement with each of the other plaintiffs mentioned above.

A number of claims alleging damages were filed against LG Display and other entities in the United Kingdom as follow-on claims from the above-described European Commission's decision in December 2010, comprising claims by iiyama (UK) Limited and its affiliates ( iiyama ) in December 2014, and Argos Limited and others ( Argos ), Granville Technology Group and others ( Granville ) and Ingram Micro and others ( Ingram ), each in December 2016. As of April 25, 2018, we are contesting the jurisdiction of the United Kingdom courts to hear claims by iiyama and are vigorously defending ourselves against claims by Granville. We have reached a settlement in principle with Argos in December 2017, and Ingram discontinued its claims against LG Display in June 2017.

In 2007, class action complaints were filed against LG Display and other TFT-LCD manufacturers in the Canadian provinces of British Columbia, Ontario and Quebec. In November 2016, LG Display reached settlement with the provinces of British Columbia, Ontario and Quebec. In March 2017, the Ontario Superior Court of Justice approved the settlement and dismissed LG Display from the Ontario class action. In April 2017, the Superior Court of Quebec approved the settlement and dismissed LG Display from the Quebec class action. In May 2017, the Supreme Court of British Columbia approved the settlement and dismissed LG Display from the British Columbia class action.

In December 2013, a class action complaint was filed by Hatzlacha, a consumer organization, on behalf of Israeli consumers against LG Display and other defendants in the Central District in Israel. In July 2017, the Supreme Court of Israel ruled in favor of the defendants to affirm the District Court's decision to revoke the leave to serve the class action on the defendants outside the jurisdiction of Israel. In August 2017, Hatzlacha filed a number of motions to uphold service in the Central District in Israel under different legal grounds, which are currently being contested by the defendants.

In each of the foregoing matters that are ongoing, we are continually evaluating the merits of the respective claims and vigorously defending ourselves. Irrespective of the validity or the successful assertion of the claims described above, we may incur significant costs with respect to litigating or settling any or all of the asserted claims. See Item 8.A. Consolidated Statements and Other Financial Information Legal Proceedings Antitrust and Others for a description of these matters. While we continue to vigorously defend the various proceedings described above, it is possible that one or more proceedings may result in cash outflow to settle or resolve these claims. We have recognized provisions with respect to those legal claims in which our management has concluded that there is a present or constructive obligation arising from a past event, it is more likely than not that an outflow of resources will result to settle the obligation, and a reliable estimate can be made of the amount of the obligation. However, the actual outcomes may be different from those estimated as of December 31, 2017 and may have an adverse effect on our operating results or financial condition.

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***We need to observe certain financial and other covenants under the terms of our debt obligations, the failure to comply with which would put us in default under such debt obligations.***

We are subject to financial and other covenants, including maintenance of credit ratings and debt-to-equity ratios, under certain of our debt obligations. The documentation for such debt also contains negative pledge provisions limiting our ability to provide liens on our assets as well as cross-default and cross-acceleration clauses, which give related creditors the right to accelerate the amounts due under such debt if an event of default or acceleration has occurred with respect to our existing or future indebtedness, or if any material part of our indebtedness or indebtedness of our subsidiaries is capable of being declared payable before the stated maturity date. In addition, such covenants restrict our ability to raise future debt financing.

If we breach the financial or other covenants contained in the documentation governing our debt obligations, our financial condition will be adversely affected to the extent we are not able to cure such breaches, obtain a waiver from the relevant lenders or debtholders or repay the relevant debt.

***Our results of operations are subject to exchange rate fluctuations.***

There has been considerable volatility in foreign exchange rates in recent years, including rates between the Korean Won and the U.S. dollar and between the Korean Won and the Japanese Yen. To the extent that we incur costs in one currency and make sales in another, our profit margins may be affected by changes in the exchange rates between the two currencies.

Our sales of display panels are denominated mainly in U.S. dollars, whereas our purchases of raw materials are denominated mainly in U.S. dollars and Japanese Yen. Our expenditures on capital equipment are denominated principally in Korean Won. In 2017, 94.7% of our sales were denominated in U.S. dollars. During the same period, 85.6% of our purchases of raw materials and components were denominated in U.S. dollars and 10.7% in Japanese Yen. In addition, 74.6% of our equipment purchases and construction costs were denominated in Korean Won, 16.2% in Chinese Renminbi and 9.1% in U.S. dollars.

Accordingly, fluctuations in exchange rates, in particular between the U.S. dollar and the Korean Won as well as between the Japanese Yen and the Korean Won, affect our pre-tax income, and in recent years, the value of the Won relative to the U.S. dollar and Japanese Yen has fluctuated widely. See Item 3.A. Selected Financial Data Exchange Rates. Although a depreciation of the Korean Won against the U.S. dollar increases the Korean Won value of our export sales and enhances the price-competitiveness of our products in foreign markets in U.S. dollar terms, it also increases the cost of imported raw materials and components in Korean Won terms and our cost in Korean Won of servicing our U.S. dollar denominated debt. A depreciation of the Korean Won against the Japanese Yen increases the Korean Won cost of our Japanese Yen denominated purchases of raw materials and components and, to the extent we have any debt denominated in Japanese Yen, our cost in Korean Won of servicing such debt, but has relatively little impact on our sales as most of our sales are denominated in U.S. dollars. In addition, continued exchange rate volatility may also result in foreign exchange losses for us. Although a depreciation of the Korean Won against the U.S. dollar, in general, has a net positive impact on our results of operations that more than offsets the net negative impact caused by a depreciation of the Korean Won against the Japanese Yen, we cannot provide assurance that the exchange rate of the Korean Won against foreign currencies will not be subject to significant fluctuations, or that the impact of such fluctuations will not adversely affect the results of our operations.

***Our business relies on our patent rights which may be narrowed in scope or found to be invalid or otherwise unenforceable.***



Our success will depend, to a significant extent, on our ability to obtain and enforce our patent rights both in Korea and worldwide. The coverage claimed in a patent application can be significantly reduced before a patent is issued, either in Korea or abroad. Consequently, we cannot provide assurance that any of our pending or future patent applications will result in the issuance of patents. Patents issued to us may be subjected to further proceedings limiting their scope and may not provide significant proprietary protection or competitive advantage. Our patents also may be challenged, circumvented, invalidated or deemed unenforceable. In addition, because patent applications in certain countries generally are not published until more than 18 months after they are first filed, and because publication of discoveries in scientific or patent literature often lags behind actual discoveries, we cannot be certain that we were, or any of our licensors was, the first creator of inventions covered by pending patent applications, that we or any of our licensors will be entitled to any rights in purported inventions claimed in pending or future patent applications, or that we were, or any of our licensors was, the first to file patent applications on such inventions.

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Furthermore, pending patent applications or patents already issued to us or our licensors may become subject to dispute, and any dispute could be resolved against us. For example, we may become involved in re-examination, reissue or interference proceedings and the result of these proceedings could be the invalidation or substantial narrowing of our patent claims. We also could be subject to court proceedings that could find our patents invalid or unenforceable or could substantially narrow the scope of our patent claims. In addition, depending on the jurisdiction, statutory differences in patentable subject matter may limit the protection we can obtain on some of our inventions.

### ***Failure to protect our intellectual property rights could impair our competitiveness and harm our business and future prospects.***

We believe that developing new products and technologies that can be differentiated from those of our competitors is critical to the success of our business. We take active measures to obtain international protection of our intellectual property by obtaining patents and undertaking monitoring activities in our major markets. However, we cannot assure you that the measures we are taking will effectively deter competitors from improper use of our proprietary technologies. Our competitors may misappropriate our intellectual property, disputes as to ownership of intellectual property may arise and our intellectual property may otherwise become known or independently developed by our competitors.

Any failure to protect our intellectual property could impair our competitiveness and harm our business and future prospects.

### ***Our rapid introduction of new technologies and products may increase the likelihood that third parties will assert claims that our products infringe upon their proprietary rights.***

The rapid technological changes that characterize our industry require that we quickly implement new processes and components with respect to our products. Often with respect to recently developed processes and components, a degree of uncertainty exists as to who may rightfully claim ownership rights in such processes and components. Uncertainty of this type increases the risk that claims alleging that such components or processes infringe upon third party rights may be brought against us. Although we take and will continue to take steps to ensure that our new products do not infringe upon third party rights, if our products or manufacturing processes are found to infringe upon third party rights, we may be subject to significant liabilities and be required to change our manufacturing processes or be prohibited from manufacturing certain products, which could have a material adverse effect on our operations and financial condition.

We may be required to defend against charges of infringement of patent or other proprietary rights of third parties. Although patent and other intellectual property disputes in our industry have often been settled through licensing or similar arrangements, such defense could require us to incur substantial expense and to divert significant resources of our technical and management personnel, and could result in our loss of rights to develop or make certain products or require us to pay monetary damages or royalties to license proprietary rights from third parties. Furthermore, we cannot be certain that the necessary licenses would be available to us on acceptable terms, if at all. Accordingly, an adverse determination in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from manufacturing and selling certain of our products. Any such litigation, whether successful or unsuccessful, could result in substantial costs to us and diversions of our resources, either of which could adversely affect our business.

In December 2013, Delaware Display Group LLC and Innovative Display Technologies LLC filed a patent infringement action against LG Display and LG Display America in the U.S. District Court for the District of Delaware. In December 2015, Delaware Display Group LLC and Innovative Display Technologies LLC filed a new

patent infringement action against LG Display and LG Display America in the U.S. District Court for the District of Delaware with respect to three patents that were dismissed without prejudice from the aforementioned patent infringement action. Since May 3, 2016, the December 2015 action has remained stayed. In August 2016, Innovative Display Technologies LLC filed a new patent infringement action against LG Display and LG Display America in the U.S. District Court for the Eastern District of Texas with respect to two new patents. In April 2017, the parties filed a stipulation of dismissal of the cases and amicably settled all claims asserted in these actions.

In March 2014, Surpass Tech Innovation LLC filed a patent infringement action against LG Display and LG Display America in the U.S. District Court for the District of Delaware. In April 2017, the case was terminated pursuant to a stipulation of dismissal filed by the parties.

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In November 2016, Vesper Technology Research LLC filed a patent infringement action against LG Display and LG Display America in the U.S. District Court for the Eastern District of Texas. In March 2017, the case was terminated pursuant to a stipulation of filed by the parties.

***We rely on technology provided by third parties and our business will suffer if we are unable to renew our licensing arrangements with them.***

From time to time, we have obtained licenses for patent, copyright, trademark and other intellectual property rights to process and device technologies used in the production of our display panels. We have entered into key licensing arrangements with third parties, for which we have made, and continue to make, periodic license fee payments. In addition, we also have cross-license agreements with certain other third parties. These agreements terminate upon the expiration of the respective terms of the patents. See Item 5.C. Research and Development, Patents and Licenses, etc. Intellectual Property License Agreements.

If we are unable to renew our technology licensing arrangements on acceptable terms, we may lose the legal protection to use certain of the processes we employ to manufacture our products and be prohibited from using those processes, which may prevent us from manufacturing and selling certain of our products, including our key products. In addition, we could be at a disadvantage if our competitors obtain licenses for protected technologies on more favorable terms than we do.

In the future, we may also need to obtain additional patent licenses for new or existing technologies. We cannot provide assurance that these license agreements can be obtained or renewed on acceptable terms or at all, and if not, our business and operating results could be adversely affected.

***We rely upon trade secrets and other unpatented proprietary know-how to maintain our competitive position in the display panel industry and any loss of our rights to, or unauthorized disclosure of, our trade secrets or other unpatented proprietary know-how could negatively affect our business.***

We also rely upon trade secrets, unpatented proprietary know-how and information, as well as continuing technological innovation in our business. The information we rely upon includes price forecasts, core technology and key customer information. We enter into confidentiality agreements with each of our employees and consultants upon the commencement of an employment or consulting relationship. These agreements generally provide that all inventions, ideas, discoveries, improvements and copyrightable material made or conceived by the individual arising out of the employment or consulting relationship and all confidential information developed or made known to the individual during the term of the relationship is our exclusive property. We cannot provide assurance that these types of agreements will be fully enforceable, or that they will not be breached. We also cannot be certain that we will have adequate remedies for any such breach. The disclosure of our trade secrets or other know-how as a result of such a breach could adversely affect our business. Also, our competitors may come to know about or determine our trade secrets and other proprietary information through a variety of methods. Disputes may arise concerning the ownership of intellectual property or the applicability or enforceability of our confidentiality agreements, and there can be no assurance that any such disputes would be resolved in our favor. Furthermore, others may acquire or independently develop similar technology, or if patents are not issued with respect to technologies arising from our research, we may not be able to maintain information pertinent to such research as proprietary technology or trade secrets and that could have an adverse effect on our competitive position within the display panel industry.

***We rely on key researchers and engineers, senior management and production facility operators, and the loss of the services of any such personnel or the inability to attract and retain them may negatively affect our business.***

Our success depends to a significant extent upon the continued service of our research and development and engineering personnel, and on our ability to continue to attract, retain and motivate qualified researchers and engineers, especially during periods of rapid growth. In particular, our focus on leading the market in introducing new products and advanced manufacturing processes has meant that we must aggressively recruit research and development personnel and engineers with expertise in cutting-edge technologies.

We also depend on the services of experienced key senior management, and if we lose their services, it would be difficult to find and integrate replacement personnel in a timely manner, if at all. We also employ highly skilled line operators at our various production facilities.

The loss of the services of any of our key research and development and engineering personnel, senior management or skilled operators without adequate replacement, or the inability to attract new qualified personnel, would have a material adverse effect on our operations.

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***The interests of LG Electronics, our largest shareholder, and any directors or officers nominated by it, may differ from or conflict with those of us or our other shareholders.***

When exercising its rights as our largest shareholder, LG Electronics may take into account not only our interests but also its interests and the interests of its affiliates. LG Electronics' interests may at times conflict with ours in a number of areas relating to our business, including potential acquisitions of businesses or properties, incurrence of indebtedness, financial commitments, sales and marketing functions, indemnity arrangements, service arrangements and the exercise by LG Electronics of significant influence over our management and affairs. See Item 6.A. Directors and Senior Management for a description of the composition of our current board of directors and senior management.

***Labor unrest may disrupt our operations.***

As of December 31, 2017, approximately 62.9% of our total employees, including those of our subsidiaries, were union members, and production employees accounted for substantially all of these members. We have a collective bargaining arrangement with our labor union, which is negotiated once a year. Any deterioration in our relationship with our employees or labor unrest resulting in a work stoppage or strike may have a material adverse effect on our financial condition and results of operations.

***We are subject to strict safety and environmental regulations and we may be subject to fines or restrictions that could cause our operations to be interrupted.***

Our manufacturing processes involve hazardous materials and generate chemical waste, waste water and other industrial waste at various stages in the manufacturing process, and we are subject to a variety of laws and regulations relating to the use, storage, discharge and disposal of such chemical by-products and waste substances. We have enacted safety measures, engaged in employee education on handling such materials and installed various types of safety and anti-pollution equipment, consistent with industry standards, for the treatment of chemical waste and equipment for the recycling of treated waste water at our various facilities. See Item 4.B. Business Overview Environmental Matters for a description of the anti-pollution equipment that we have installed in our various facilities. However, we cannot provide assurance that our protocols will always be followed and safety or environmental related claims will not be brought against us or that the local or national governments will not take steps toward adopting more stringent safety or environmental standards. For example, in February 2015, we were issued a corrective order and assessed a fine of ₩276 million for violating the Occupational Health and Safety Act in connection with an accidental exposure of nitrogen gas at one of our production facilities in Paju, Korea in January 2015. Further, in connection with such incident, in January 2016, the Goyang Branch Court of the Uijeongbu District Court imposed a fine of ₩10 million on us and a suspended sentence on five of our employees involved in the incident, citing violations of the Occupational Health and Safety Act. The parties appealed the decision to the Uijeongbu District Court and following the denial of their appeals, the parties decided not to further appeal the decision of the Goyang Branch Court.

Any failure on our part to comply with any present or future safety and environmental regulations could result in the assessment of damages or imposition of fines against us, suspension of production or a cessation of operations. In addition, safety and environmental regulations could require us to acquire costly equipment or to incur other significant compliance expenses that may materially and negatively affect our financial condition and results of operations.

**Risks Relating to our American Depositary Shares, or ADSs, or our Common Stock**

***Future sales of shares of our common stock in the public market may depress our stock price and make it difficult for you to recover the full value of your investment in our common stock or our ADSs.***

We cannot predict the effect, if any, that market sales of shares of our common stock or the availability of our common stock for sale will have on the market price of our common stock prevailing from time to time. Our largest shareholder, LG Electronics, currently owns 37.9% of our voting stock. There is no assurance that LG Electronics will not sell all or a part of its ownership interest in us.

Any future sales by LG Electronics or any future issuance by us of a significant number of shares of our common stock in the public market, or the perception that any of these events may occur, could cause the market price of our common stock to decrease or to be lower than it might be in the absence of these events or perceptions.

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***Our public shareholders may have more difficulty protecting their interests than they would as shareholders of a U.S. corporation.***

Our corporate affairs are governed by our articles of incorporation and by the laws governing Korean corporations. The rights and responsibilities of our shareholders and members of our board of directors under Korean law may be different from those that apply to shareholders and directors of a U.S. corporation. For example, minority shareholder rights afforded under Korean law often require the minority shareholder to meet minimum shareholding requirements in order to exercise certain rights. In the case of public companies, a shareholder must own, individually or collectively with other shareholders, at least 0.01% of our common stock for at least six consecutive months in order to file a derivative suit on our behalf. While the facts and circumstances of each case will differ, the duty of care required of a director under Korean law may not be the same as the fiduciary duty of a director of a U.S. corporation. Therefore, holders of our common stock or our ADSs may have more difficulty protecting their interests against actions of our management, members of our board of directors or controlling shareholders than they would as shareholders of a U.S. corporation.

***You may be limited in your ability to deposit or withdraw the common stock underlying the ADSs, which may adversely affect the value of your investment.***

Under the terms of our deposit agreement, holders of common stock may deposit such common stock with the depository's custodian in Korea and obtain ADSs, and holders of ADSs may surrender ADSs to the depository and receive common stock. However, to the extent that a deposit of common stock exceeds the difference between:

the aggregate number of shares of common stock we have consented to allow to be deposited for the issuance of ADSs (including deposits in connection with offerings of ADSs and stock dividends or other distributions relating to ADSs); and

the number of shares of common stock on deposit with the custodian for the benefit of the depository at the time of such proposed deposit,

such common stock will not be accepted for deposit unless (1) our consent, subject to governmental authorization, with respect to such deposit has been obtained or (2) such consent is no longer required under Korean laws and regulations.

Under the terms of the deposit agreement, no consent is required if the shares of common stock are obtained through a dividend, free distribution, rights offering or reclassification of such stock. The current limit on the number of shares that may be deposited into our ADR facility is 68,095,700 as of April 25, 2018. The number of shares issued or sold in any subsequent offering by us or our major shareholders, subject to government authorization, raises the limit on the number of shares that may be deposited into the ADR facility, except to the extent such deposit is prohibited by applicable laws or violates our articles of incorporation, or we decide with the ADR depository to limit the number of shares of common stock so offered that would be eligible for deposit under the deposit agreement in order to maintain liquidity for the shares in Korea as may be requested by the relevant Korean authorities. We might not consent to the deposit of any additional shares of common stock. As a result, if a holder surrenders ADSs and withdraws common stock, it may not be able to deposit the common stock again to obtain ADSs.

***Holders of ADSs will not have preemptive rights in some circumstances.***



The Korean Commercial Code of 1962, as amended, and our articles of incorporation require us, with some exceptions, to offer shareholders the right to subscribe for new shares of our common stock in proportion to their existing shareholding ratio whenever new shares are issued, except under certain circumstances as provided in our articles of incorporation. Accordingly, if we issue new shares to non-shareholders based on such exception, a holder of our ADSs may experience dilution in its holdings. Furthermore, if we offer any right to subscribe for additional shares of our common stock or any rights of any other nature to existing shareholders subject to their preemptive rights, the depository, after consultation with us, may make the rights available to holders of our ADSs or use reasonable efforts to dispose of the rights on behalf of such holders and make the net proceeds available to such holders. The depository, however, is not required to make available to holders any rights to purchase any additional shares of our common stock unless it deems that doing so is lawful and feasible and

a registration statement filed by us under the U.S. Securities Act of 1933, as amended, is in effect with respect to those shares; or

the offering and sale of those shares is exempt from or is not subject to the registration requirements of the Securities Act.

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We are under no obligation to file any registration statement with the SEC or to endeavor to cause such a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, a holder of our ADSs may be unable to participate in our rights offerings and may experience dilution in its holdings. If a registration statement is required for a holder of our ADSs to exercise preemptive rights but is not filed by us or is not declared effective, the holder will not be able to exercise its preemptive rights for additional ADSs and it will suffer dilution of its equity interest in us. If the depositary is unable to sell rights that are not exercised or not distributed or if the sale is not lawful or feasible, it will allow the rights to lapse, in which case the holder will receive no value for these rights.

***Holders of ADSs will not be able to exercise dissent and appraisal rights unless they have withdrawn the underlying shares of our common stock and become our direct shareholders.***

In some limited circumstances, including the transfer of the whole or any significant part of our business and our merger or consolidation with another company, dissenting shareholders have the right to require us to purchase their shares under Korean law. However, a holder of our ADSs will not be able to exercise such dissent and appraisal rights if the depositary refuses to do so on their behalf. Our deposit agreement does not require the depositary to take any action in respect of exercising dissent and appraisal rights. In such a situation, holders of our ADSs must initiate the withdrawal of the underlying common stock from the ADS facility (and incur charges relating to that withdrawal) by the day immediately following the date of public disclosure of our board of directors' resolution of a merger or other events triggering appraisal rights and become our direct shareholder prior to the record date of the shareholders meeting at which the relevant transaction is to be approved, in order to exercise dissent and appraisal rights.

***Dividend payments and the amount you may realize upon a sale of our common stock or ADSs that you hold will be affected by fluctuations in the exchange rate between the U.S. dollar and the Korean Won.***

Cash dividends, if any, in respect of the shares represented by our ADSs will be paid to the depositary in Korean Won and then converted by the depositary into U.S. dollars, subject to certain conditions. Accordingly, fluctuations in the exchange rate between the Korean Won and the U.S. dollar will affect, among other things, the amounts a holder will receive from the depositary in respect of dividends, the U.S. dollar value of the proceeds that a holder would receive upon sale in Korea of the shares of our common stock obtained upon surrender of ADSs and the secondary market price of ADSs. Such fluctuations will also affect the U.S. dollar value of dividends and sales proceeds received by holders of our common stock.

## **Risks Relating to Korea**

***If economic conditions in Korea deteriorate, our current business and future growth could be materially and adversely affected.***

We are incorporated in Korea, and a substantial portion of our operations and assets are located in Korea. As a result, we are subject to political, economic, legal and regulatory risks specific to Korea. The economic indicators in Korea in recent years have shown mixed signs, and future growth of the Korean economy is subject to many factors beyond our control, including developments in the global economy.

In recent years, adverse conditions and volatility in the worldwide financial markets, fluctuations in oil and commodity prices and the general weakness of the global economy have contributed to the uncertainty of global economic prospects in general and have adversely affected, and may continue to adversely affect, the Korean economy. The value of the Won relative to major foreign currencies has fluctuated significantly and, as a result of adverse global and Korean economic conditions, there has been volatility in the stock prices of Korean companies in

recent years. Future declines in the Korea Composite Stock Price Index (the KOSPI ) and large amounts of sales of Korean securities by foreign investors and subsequent repatriation of the proceeds of such sales may adversely affect the value of the Won, the foreign currency reserves held by financial institutions in Korea and the ability of Korean companies to raise capital. Any future deterioration of the Korean or global economy could adversely affect our business, financial condition and results of operations.

Developments that could have an adverse impact on Korea's economy include:

declines in consumer confidence and a slowdown in consumer spending in the Korean or global economy;

deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy (such as the controversy between Korea and China regarding the deployment of a Terminal High Altitude Area Defense system in Korea by the United States commencing in March 2017 and the economic and other retaliatory measures imposed by China against Korea during the remainder of 2017;

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adverse conditions in the economies of countries and regions that are important export markets for Korea, such as China, the United States, Europe and Japan, or in emerging market economies in Asia or elsewhere, as well as increased uncertainties in the wake of Brexit;

adverse changes or volatility in foreign currency reserve levels, commodity prices (including oil prices), exchange rates (including fluctuation of the U.S. dollar, the Euro or the Japanese Yen exchange rates or revaluation of the Chinese Renminbi and the overall impact of Brexit on the value of the Korean Won), interest rates, inflation rates or stock markets;

increased sovereign default risk in select countries and the resulting adverse effects on the global financial markets;

investigations of large Korean business groups and their senior management for possible misconduct;

a continuing rise in the level of household debt and increasing delinquencies and credit defaults by retail and small- and medium-sized enterprise borrowers in Korea;

the economic impact of any pending or future free trade agreements or changes in existing free trade agreements;

social and labor unrest;

decreases in the market prices of Korean real estate;

a decrease in tax revenue or a substantial increase in the Korean government's expenditures for fiscal stimulus measures, unemployment compensation and other economic and social programs that would lead to an increased Korean government budget deficit;

financial problems or lack of progress in the restructuring of Korean business groups, other large troubled companies, their suppliers or the financial sector;

loss of investor confidence arising from corporate accounting irregularities or corporate governance issues at certain Korean companies;

increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;

geo-political uncertainty and the risk of further attacks by terrorist groups around the world;

the occurrence of severe health epidemics in Korea or other parts of the world (such as the Middle East Respiratory Syndrome outbreak in Korea in 2015);

natural or man-made disasters that have a significant adverse economic or other impact on Korea or its major trading partners;

political uncertainty or increasing strife among or within political parties in Korea;

hostilities or political or social tensions involving oil producing countries in the Middle East and North Africa and any material disruption in the global supply of oil or sudden increase in the price of oil;

increased reliance on exports to service foreign currency debts, which could cause friction with Korea's trading partners;

the continued growth of the Chinese economy, to the extent its benefits (such as increased exports to China) are outweighed by its costs (such as competition in export markets or for foreign investment and the relocation of manufacturing bases from Korea to China);

political or social tensions involving Russia and any resulting adverse effects on the global supply of oil or the global financial markets; and

an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

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***Escalations in tensions with North Korea could have an adverse effect on us and the market value of our common stock and ADSs.***

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In particular, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapon and ballistic missile programs as well as its hostile military actions against Korea. Some of the significant incidents in recent years include the following:

North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted six rounds of nuclear tests since October 2006, including claimed detonations of hydrogen bombs, which are more powerful than plutonium bombs, and warheads that can be mounted on ballistic missiles. Over the years, North Korea has also conducted a series of ballistic missile tests, including missiles launched from submarines and intercontinental ballistic missiles that it claims can reach the United States mainland. In response, the Korean government has repeatedly condemned the provocations and flagrant violations of relevant United Nations Security Council resolutions. In February 2016, the Korean government also closed the inter-Korea Gaesong Industrial Complex in response to North Korea's fourth nuclear test in January 2016. Internationally, the United Nations Security Council has passed a series of resolutions condemning North Korea's actions and significantly expanding the scope of sanctions applicable to North Korea, most recently in December 2017 in response to North Korea's intercontinental ballistic missile test in November 2017. Over the years, the United States and the European Union have also expanded their sanctions applicable to North Korea.

In August 2015, two Korean soldiers were injured in a landmine explosion near the Korean demilitarized zone. Claiming the landmines were set by North Koreans, the Korean army re-initiated its propaganda program toward North Korea utilizing loudspeakers near the demilitarized zone. In retaliation, the North Korean army fired artillery rounds on the loudspeakers, resulting in the highest level of military readiness for both Koreas.

In March 2010, a Korean naval vessel was destroyed by an underwater explosion, killing many of the crewmen on board. The Korean government formally accused North Korea of causing the sinking, while North Korea denied responsibility. Moreover, in November 2010, North Korea fired more than one hundred artillery shells that hit Korea's Yeonpyeong Island near the Northern Limit Line, which acts as the de facto maritime boundary between Korea and North Korea on the west coast of the Korean peninsula, causing casualties and significant property damage. The Korean government condemned North Korea for the attack and vowed stern retaliation should there be further provocation.

North Korea's economy also faces severe challenges, which may further aggravate social and political pressures within North Korea. Although a bilateral summit between the two Koreas was held in April 2018, and there has been an announcement in March 2018 of a potential summit between the United States and North Korea, there can be no assurance that the level of tensions affecting the Korean peninsula will not escalate in the future. Any further increase in tensions, which may occur, for example, if North Korea experiences a leadership crisis, high-level contacts between Korea and North Korea break down or further military hostilities occur, could have a material adverse effect on the Korean economy and on our business, financial condition and results of operations and the market value of our common stock and ADSs.

***If the Korean government deems that emergency circumstances are likely to occur, it may restrict holders of our ADSs and the depositary from converting and remitting dividends and other amounts in U.S. dollars.***

Under the Korean Foreign Exchange Transaction Law, if the Korean government deems that certain emergency circumstances, including sudden fluctuations in interest rates or exchange rates, extreme difficulty in stabilizing the balance of payments or substantial disturbance in the Korean financial and capital markets, are likely to occur, it may impose any necessary restrictions as requiring Korean or foreign investors to obtain prior approval from the Minister of Strategy and Finance for the acquisition of Korean securities or the repatriation of interest, dividends or sales proceeds arising from disposition of such securities or other transactions involving foreign exchange. See Item 10.D. Exchange Controls.

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We are a leading innovator of TFT-LCD, OLED and other display panel technologies. We manufacture display panels in a broad range of sizes and specifications primarily for use in televisions, notebook computers, desktop monitors, tablet computers and various other applications, including mobile devices.

The origin of our display business, which first started with TFT-LCD panels, can be traced to the TFT-LCD research that began in 1987 at the Goldstar R&D Center, which was then part of LG Electronics Inc. TFT-LCD research continued at the Anyang R&D Center, a research and development center established by LG Electronics in 1990 in Anyang, Korea, which was subsequently moved to our Paju Display Cluster in 2008, and which today continues to lead our technology innovation efforts. In 1993, the TFT-LCD business division was launched within LG Electronics, and in September 1995 mass production of TFT-LCD panels began at P1, its first fabrication facility, producing mainly TFT-LCD panels for notebook computers and other applications. In December 1997, LG Semicon Inc., a subsidiary of LG Electronics, began mass production at P2, producing mainly TFT-LCD panels for notebook computers.

We were incorporated in 1985 under the laws of the Republic of Korea under the original name of Goldstar Software Co., Ltd., a subsidiary of LG Electronics whose main business was the development and marketing of software, which changed its name to LG Software, Ltd. in January 1995 and subsequently to LG Soft, Ltd. in January 1997. At the end of 1998, LG Electronics and LG Semicon transferred their respective TFT-LCD-related businesses to LG Soft, which, as part of the business transfer, changed its name to LG LCD Co., Ltd.

In July 1999, LG Electronics entered into a joint venture agreement with Koninklijke Philips Electronics N.V., pursuant to which Philips Electronics acquired a 50% interest in LG LCD. In connection with this transaction, LG LCD transferred its existing software-related business to LG Electronics in order to focus solely on the TFT-LCD business. The joint venture, which was renamed LG.Philips LCD Co., Ltd., was officially launched in August 1999. In July 2004, we completed our initial public offering and listed shares of our common stock on the Korea Exchange under the identifying code 034220 and our ADSs on the New York Stock Exchange under the symbol LPL. Prior to the listings, LG Electronics and Philips Electronics terminated the joint venture agreement and entered into a shareholders agreement to reflect new arrangements between them as controlling shareholders. The shareholders agreement automatically terminated upon Philips Electronics sale of all of its remaining ownership interest in us in March 2009. Effective March 3, 2008, we changed our name from LG.Philips LCD Co., Ltd. to LG Display Co., Ltd. in order to reflect the expansion of our business scope and shift in business model, fully expressing our commitment to the future.

We launched our OLED Business Unit in June 2008 in anticipation of future growth of the OLED business. The origin of our OLED business began with our acquisition of LG Electronics active matrix OLED, or AMOLED, business in January 2008 by way of taking over its inventory, intellectual property rights and employees related to the AMOLED business. In 2012, partly in recognition of the growing importance of OLED to the future of our business, especially in connection with large-sized products, we restructured our internal organization relating to our OLED business, breaking up the OLED Business Unit and transferring our mobile-related business (including OLED products for mobile and other applications) to the newly created IT/Mobile Business Division and transferring our OLED television panel business to the Television Business Division. We were the first in the world to commence mass production of 55-inch OLED television panels in 2013. In December 2014, we established a separate OLED Business Division to strengthen our OLED business and solidify our competitive advantages. In December 2015, in order to achieve synergies and further strengthen our OLED business, we acquired LG Chem's OLED light business



by way of assuming the inventory, intellectual property rights and employees related to the OLED light business. In December 2016, partly in an effort to expand our OLED business across our display panel applications (including small- and medium-sized products), we restructured our internal organization by product type, and integrated the capabilities of our OLED business into the Television Business Division (which also encompassed the OLED light business), the IT Business Division and the Mobile Business Division. In December 2017, our OLED light business was transferred from the Television Business Division to the IT Business Division. Our principal executive offices are located at LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul 07336 and our telephone number is +82-2-3777-1010.

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We have continued to develop our manufacturing process technologies and expand our production facilities. Each successive generation of our fabrication facilities has been designed to process increasingly larger-size glass substrates, which allows us to cut a larger number of panels, sometimes with larger sizes, from each glass substrate. The ability to process larger glass substrates allows us to produce a larger variety of display sizes to accommodate evolving business and consumer demands. For example, in order to respond to business and consumer demands for large-sized panels for televisions, in September 2014, we commenced mass production at our GP fabrication facility in Guangzhou, China, which is optimized to large-sized full high definition, or Full HD, and Ultra HD TFT-LCD panels for televisions. In addition, due to the large number of fabrication facilities we operate, we have the flexibility to make strategic decisions based on market demand to convert existing production lines housed within a fabrication facility to manufacture display panels based on newer technologies. For example, we established our AP3 production lines by converting a set of existing production lines in our P61 fabrication facility, which originally produced a-Si based display panels, to produce LTPS based display panels for mobile devices and commenced mass production in February 2014.

We work closely with the local authorities where our fabrication facilities are located, and we have signed a number of memoranda of understandings, the latest one having been signed in April 2016, with Gumi City and North Gyeongsang Province for their administrative assistance in connection with our investment at our Gumi Display Cluster in our E5 plastic OLED panel fabrication production line as well as our new fifth-generation OLED light panel fabrication facility. In August 2017, we began production of plastic OLED panels for mobile and other applications on our newly constructed E5 production line and expect to commence similar productions on our new E6 production line in the second half of 2018, subject to market conditions and any changes in our investment timetable.

With respect to our ongoing expansion and conversion projects, in November 2015, we announced plans for the construction of our next generation P10 fabrication facility in Paju, Korea, which we expect to complete in the second half of 2018. In July 2017, we announced plans to make investments in an aggregate amount of ₩7.8 trillion in a next generation large-size OLED production line and a next generation plastic OLED production line in Paju, Korea. In addition, we have commenced mass production of plastic OLED panels on our new E5 production line beginning in August 2017 and expect to commence mass production on our new E6 production line in the second half of 2018. In April 2016, we entered into a memorandum of understanding with the City of Haiphong in Vietnam for their administrative assistance in connection with our planned ₩120 billion investment to build our new module assembly facility in Haiphong, which facility commenced production in July 2017. In response to and in anticipation of growing demand in the China market, in July 2017, we announced our plan to establish a joint venture with the government of Guangzhou to construct a next generation large-sized OLED production line, which is expected to commence production in the second half of 2019, at our GP fabrication facility in Guangzhou, China, and we plan to invest approximately ₩1.8 trillion to acquire a 70% ownership interest in such joint venture. Each of our on-going expansion projects are subject to market conditions and any changes in our investment timetable. See Item 4.D. Property, Plants and Equipment Capital Expenditures.

With respect to our assembly facilities, from 1995 to early 2003, we assembled all panels in our Gumi assembly facility adjacent to our P1 facility. In May 2003, we commenced operations at a new assembly facility in Nanjing, China, which we built and have since expanded, in order to better serve the needs of our global customers with manufacturing facilities in China. In January 2006, we commenced operations at a new assembly facility in Paju, Korea. In February 2007, we commenced mass production at our module production plant in Wroclaw, Poland. In December 2007, we commenced mass production at our module production plant in Guangzhou, China.

For a description of cash outflows relating to our capital expenditures in the past three fiscal years, see Item 5.A. Operating Results Overview Manufacturing Productivity and Costs.

**Item 4.B. *Business Overview***  
**Overview**

We manufacture TFT-LCD and OLED technology-based display panels in a broad range of sizes and specifications primarily for use in televisions, notebook computers, desktop monitors, tablet computers and mobile devices, including smartphones, and we are one of the world's leading suppliers of Ultra HD television panels. We also manufacture display panels for industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment. In 2017, we sold a total of 142.2 million display panels that are nine inches or larger. According to IHS Technology, we had a global market share for display panels of nine inches or larger of approximately 28% based on sales revenue in 2017.

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We currently operate fabrication facilities, which include separately designated sets of fabrication production lines housed in certain facilities, located in our Display Clusters in Gumi and Paju, Korea and in Guangzhou, China. We also currently operate module facilities located in China (Nanjing, Guangzhou and Yantai), Korea (Gumi and Paju) and Poland (Wroclaw). For a full description of our current facilities, see Item 4.D. Property, Plants and Equipment Current Facilities.

We seek to build our market position based on collaborative relationships with our customers and suppliers, a focus on high-end differentiated specialty display products and manufacturing productivity. Our end-brand customers include many of the world's leading manufacturers of televisions, notebook computers, desktop monitors, tablet computers and mobile phones such as LG Electronics. For a description of our sales to LG Electronics, our largest shareholder, see Item 7.B. Related Party Transactions.

At the direction of our end-brand customers, we typically ship our display panels to their original equipment manufacturers, known as system integrators, who use our display panels in products they assemble on a contract basis for our end-brand customers. Our sales are conducted through our multi-channel sales and distribution network, including direct sales to end-brand customers and their system integrators, sales through our overseas subsidiaries and sales through our affiliated trading company, LG International, and its subsidiaries. For a description of our sales arrangements with LG International, see Item 7.B. Related Party Transactions.

Our sales were ₩28,384 billion in 2015, ₩26,504 billion in 2016 and ₩27,790 billion in 2017 (US\$26,035 million) in 2017.

## **Technology Description**

### ***TFT-LCD Technology***

A TFT-LCD panel consists of two thin glass substrates and polarizer films between which a layer of liquid crystals is deposited and behind which a light source called a backlight unit is mounted. The frontplane glass substrate is fitted with a color filter, while the backplane glass substrate, also called a TFT array, has many thin film transistors, or TFT, formed on its surface. The liquid crystals are normally aligned to allow the polarized light from the backlight unit to pass through the two glass panels. When voltage is applied to the transistors on the TFT array, the liquid crystals change their alignment and alter the amount of light that passes through them. Meanwhile, the color filter on the frontplane glass substrate gives each pixel its own color. The combination of these pixels in different colors and levels of brightness forms the image on the panel.

The process for manufacturing a TFT-LCD panel consists of four steps:

*TFT array process* involves fabricating a large number of thin film transistors on the backplane glass substrate. The number of transistors corresponds to the number of pixels on the screen. The process is similar to the process for manufacturing semiconductor chips, except that transistors are fabricated on large glass substrates instead of silicon wafers. Unlike in the semiconductor industry, however, the number of transistors per glass substrate is not a primary driver of the manufacturing costs for TFT-LCDs. Once the TFT array process on glass substrates is completed, the substrates are cut into panel-sized pieces;

*Color filter process* involves fabricating a large number of color regions on the frontplane glass substrate that will overlay the TFT array prior to the cell process. The colored dots of red, green and blue combine to form various colors. The process is similar to the TFT array process but involves depositing colored dyes instead of transistors;

*Cell process* involves joining together the backplane glass substrate that is arrayed with transistors and the frontplane glass substrate that is patterned with a color filter. The space between the two glass substrates is filled with liquid crystal materials. The resulting panel is called a cell; and

*Module assembly process* involves connecting additional components, such as driver integrated circuits and backlight units, to the cell.

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The TFT array, color filter and cell processes are capital-intensive and require highly automated production equipment and are the primary determinants of fixed manufacturing cost. In contrast, the module assembly process involves semi-automated production equipment and manual labor to assemble the various components. Materials are the primary drivers of variable manufacturing cost.

***IPS Technology***

In-Plane Switching, or IPS, is a liquid crystal switching technology that was developed to address commonly faced problems with TFT-LCD panels that utilized other liquid crystal technologies, namely narrow viewing angles, inconsistent picture uniformity and slow response times. Unlike other liquid crystal technologies where the liquid crystals are aligned vertically or at an angle in relation to the glass substrate, with IPS technology, the liquid crystals are aligned horizontally in parallel to the glass substrate, which allows for wider viewing angles, greater picture uniformity and faster response times. Our TFT-LCD display panels, including our TFT-LCD television panels, utilize IPS technology.

Advanced High Performance IPS, or AH-IPS, is an IPS technology that integrates ultra-fine pitch technology and high transmittance technology, which allows for ultra-high resolution imagery, increased luminance and greater energy efficiency. For example, in April 2014, we produced a 5.5-inch quad high definition ( Quad HD ) smartphone panel, which has four times the resolution (538 pixels-per-inch) of a conventional HD panel. In February 2017, we also introduced a 5.7-inch Quad HD smartphone panel with an upgraded resolution of 564 pixels per inch. AH-IPS is currently utilized in our smartphone panels and other mobile display products, as well as certain of our panels for notebook computers, tablet computers and desktop monitors.

***OLED Technology***

An OLED panel consists of a thin film of organic material encased between anode and cathode electrodes. When a current is applied, light is emitted directly from the organic material. Because a separate backlight is not needed, OLED panels can be lighter and thinner compared to TFT-LCD panels, which require a separate backlight. In addition, images projected on OLED panels have higher contrast ratios and more realistic color reproduction compared to images projected on TFT-LCD panels.

We utilize different types of sub-pixel and backplane technologies in our OLED panels. Under the RGB sub-pixel structure, a combination of red, green and blue sub-pixels without color filters or white sub-pixels are used to produce a range of colors. While we, along with most of our competitors, utilize RGB sub-pixel technology for small- and medium-sized products, there are various technical challenges in scaling RGB sub-pixel technology for large-sized products, such as television panels. For our large-sized OLED panels, we have overcome these challenges by opting to utilize our WRGB sub-pixel structure, whereby red, green and blue color filters are placed over white OLED sub-pixels to produce a range of colors and began production of OLED television panels on our E3 production lines in January 2013 and mass production of OLED television panels on our E4 production lines in December 2014. As for backplane technology, our large-sized OLED products are produced using oxide TFT backplane technology as compared to our smaller-sized OLED products which utilize LTPS backplane technology, as described in greater detail below.

***Backplane Technology******Oxide TFT***

We use oxide TFT technology to produce backplanes for use in our large-sized OLED panels, such as the panels used in OLED television products. The traditional amorphous silicon-based TFT, or a-Si TFT, backplane technology has certain limitations that render it unsuitable for producing backplanes for use in large-sized OLED panels with high resolutions and fast refresh rates. For example, in larger and higher-resolution display panels, a-Si TFT backplanes consume increased rates of power and experience a decrease in the rate at which each transistor is able to switch between images, or the rate of mobility.

As an alternative to a-Si TFT backplane technology, we have successfully adopted a metal oxide-based TFT, or simply oxide TFT, backplane technology. In place of the amorphous silicon-based semiconductors used in a-Si TFT backplanes, oxide TFT backplanes utilize metal oxide-based semiconductors, which consume less energy, have a higher rate of mobility and allow for construction of display panels with narrower bezels as compared to display panels with traditional a-Si TFT backplanes.

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We were the first company in the display industry to successfully adopt oxide TFT technology in large-sized OLED products, which has been a key factor in reducing the costs of manufacturing large-sized OLED panels in large quantities. Because the manufacturing process of oxide TFT-based OLED panels is similar to the process used to manufacture TFT-LCD panels, we are able to use our existing TFT-based production lines with relatively little modification to mass produce large-sized OLED panels.

### *LTPS*

LTPS backplanes have superior current-driving capacity and produce brighter images, while consuming less energy compared to a-Si TFT or oxide TFT backplanes, due to their higher mobility rates. However, due to a complex manufacturing process, LTPS backplanes have relatively higher production costs compared to a-Si TFT or oxide TFT backplanes, making it uneconomical to use in the production of large-sized panels. As a result, we generally utilize LTPS backplanes in the production of smaller-sized panels, particularly in TFT-LCD and OLED smartphone panels.

## **Products**

We manufacture display panels of various specifications that are integrated by our customers into principally the following products:

Televisions, which utilize large-sized display panels ranging from 18.5 inches to 105 inches in size, including Ultra HD television panels, which have four times the number of pixels compared to conventional HD television panels;

Notebook computers, which utilize display panels ranging from 10.1 inches to 21.5 inches in size;

Desktop monitors, which utilize large-sized display panels ranging from 14 inches to 37.5 inches in size;

Tablet computers, which utilize display panels ranging from 7 inches to 12.9 inches in size; and

Mobile and other applications, which utilize a wide array of display panel sizes, including smartphones and other types of mobile phones and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.

Unless otherwise specified, when we refer to panels in this annual report, we mean assembled cells with added components, such as driver integrated circuits and backlight units.

We design and manufacture our panels to meet the various size and performance specifications of our customers, including specifications relating to thinness, weight, resolution, color quality, power consumption, response times and viewing angles. The specifications vary from product to product. For television panels, a premium is placed on faster response times, wider viewing angles, higher resolution and greater color fidelity. Notebook computer panels require an emphasis on thinness, light weight and power efficiency, while desktop monitor panels demand a greater focus on brightness, color brilliance and wide viewing angles. For mobile panels, particularly smartphones, an emphasis is



placed on brightness and power efficiency.

In addition to manufacturing and selling display panels, we also manufacture and sell desktop monitors through our joint venture companies. See Joint Ventures.

### ***Televisions***

Our television display panels range from 18.5 inches to 105 inches in size. We began mass production of television display panels in 2001. Our sales of display panels for televisions were ₩10,854 billion, or 38.2% of our total revenue, in 2015, ₩10,133 billion, or 38.2% of our total revenue, in 2016 and ₩11,718 billion (US\$10,978 million), or 42.2% of our total revenue, in 2017 and constituted our largest product category in each of the past three years. In 2017, our principal products in this category in terms of sales revenue consisted of 32-inch, 43-inch, 49-inch, 55-inch and 65-inch display panels.

Brand manufacturers of televisions and their distribution channels prefer long-term arrangements with a limited number of display panel suppliers that can offer a full product line, and we believe that we are well positioned to meet their requirements with our strengths in technology, manufacturing scale and efficiency as well as the breadth of our product portfolio.

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**Table of Contents*****Notebook Computers***

Our display panels for notebook computers range from 10.1 inches to 21.5 inches in size in a variety of display formats and constituted our fifth largest product category in terms of sales revenue in 2017. Revenue from sales of our display panels for notebook computers was ₩2,509 billion, or 8.8% of our total revenue, in 2015, ₩2,384 billion, or 9.0% of our total revenue, in 2016 and ₩2,244 billion (US\$2,102 million), or 8.1% of our total revenue, in 2017. In 2017, our principal products in terms of sales revenue in this category were 12.3-inch, 13.3-inch, 14.0-inch, 15.4-inch and 15.6-inch display panels.

Consumer demand for notebook computers has steadily declined in recent years due in part from competition from tablet computers and smartphones that are more economical and convenient to use compared to notebook computers while offering similar levels of computing functionality.

***Desktop Monitors***

Our desktop monitor display panels range from 14 inches to 37.5 inches in size in a variety of display resolutions and formats. Revenue from sales of our display panels for desktop monitors was ₩4,553 billion, or 16.0% of our total revenue, in 2015, ₩4,035 billion, or 15.2% of our total revenue, in 2016 and ₩4,393 billion (US\$4,116 million), or 15.8% of our total revenue, in 2017 and constituted our third largest product category in each of the past three years.

In 2017, our principal products in terms of sales revenue in this category were 21.5-inch, 23-inch, 23.8-inch and 27-inch display panels.

***Tablet Computers***

Our tablet computer display panels range from 7 inches to 12.9 inches in size in a variety of display formats and constituted our fourth largest product category in 2017. Revenue from sales of our display panels for tablet computers was ₩2,510 billion, or 8.8% of our total revenue, in 2015, ₩2,696 billion, or 10.2% of our total revenue, in 2016 and ₩2,370 billion (US\$2,220 million), or 8.5% of our total revenue, in 2017.

After experiencing steady growth in consumer demand for tablet computers since they were first introduced, consumer demand has generally plateaued in recent years. In 2017, our principal products in terms of sales revenue in this category were 7.85-inch, 9.7-inch, 10.5-inch and 12.9-inch display panels.

***Mobile and Other Applications***

Our product portfolio also includes panels for mobile and other applications, which utilize a wide array of display panel sizes, including smartphones and other types of mobile phones and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment. Display panels that are nine inches and smaller are referred to as small- and medium-sized panels.

While this was our fastest growing category of products in terms of revenue growth in recent years, driven largely by an increase in demand for increasingly larger-sized smartphone panels, consumer demand has plateaued in recent years. Revenue from sales of our display panels for mobile and other applications was ₩7,919 billion, or 27.9% of our total revenue, in 2015, ₩7,216 billion, or 27.2% of our total revenue, in 2016 and ₩7,020 billion (US\$6,577 million), or 25.3% of our total revenue, in 2017. In 2017, sales of panels for smartphones continued to constitute a significant majority in terms of both sales revenue and sales volume in the mobile and other applications category.

Some of the panels we produce for industrial products, such as medical diagnostic equipment, are highly specialized niche products manufactured to the specifications of our clients, while others, such as industrial controllers, may be manufactured by slightly modifying a standard product design for our other products, such as desktop monitors. Display panels for these other applications broaden our sales base and product mix. They are also often a good channel through which we can commercialize a particular technology that we have developed. We generally determine the production level and specification of our display panels for mobile and other applications by assessing various business opportunities as they arise.

**Table of Contents****Sales and Marketing****Customer Profile**

Our display panels are included primarily in televisions, notebook computers, desktop monitors, tablet computers and mobile and other applications sold by our global end-brand customers, including LG Electronics. LG Electronics is our largest shareholder, and the terms of our sales to LG Electronics are negotiated based on then-prevailing market prices as adjusted for LG Electronics requirements, including volume and specifications. See Item 7.B. Related Party Transactions for further description of our sales to LG Electronics.

We negotiate directly with our end-brand customers concerning the terms and conditions of the sales, but typically ship our display panels to designated system integrators at the direction of these end-brand customers. Sales data to end-brand customers include direct sales to these end-brand customers as well as sales to their designated system integrators, including through our affiliated trading company, LG International, and its subsidiaries, as further discussed below under Sales.

A substantial portion of our sales is attributable to a limited number of our end-brand customers. Our top ten end-brand customers together accounted for approximately 82% of our sales in each of 2015 and 2016 and 81% in 2017. Of our top ten end-brand customers, two of them accounted for more than 10% of our sales on an individual basis for each of the past three years. For example, sales to LG Electronics, including as a system integrator, amounted to 23.5%, 21.9% and 23.4% of our sales in 2015, 2016 and 2017 respectively.

In addition to our top ten end-brand customers, we sell our display panels to a variety of other manufacturers of computers and electronic products. Sales to these other manufacturers constituted approximately 18% of our sales in each of 2015 and 2016 and 20% in 2017, respectively.

The following table sets forth for the years indicated the geographic breakdown of our sales by the region where purchase orders originate, without regard to the location of end-brand customers. The figures below therefore reflect orders from our end-brand customers, their system integrators and our affiliated trading company, LG International, and its subsidiaries:

	2015		2016		2017		2017	
	Sales	%	Sales	%	Sales	Sales <sup>(3)</sup>	%	
	(in billions of Won and millions of US\$, except for percentages)							
Korea	₩ 2,218	7.8%	₩ 1,825	6.9%	₩ 1,996	US\$ 1,870		7.2%
China	19,375	68.3	18,368	69.3	18,091	16,948		65.1
Europe	2,204	7.8	2,109	8.0	2,595	2,431		9.3
Asia (excluding China)	2,012	7.1	1,729	6.5	2,250	2,108		8.1
United States	1,981	7.0	2,053	7.7	2,725	2,553		9.8
Others <sup>(1)</sup>	594	2.0	420	1.6	134	126		0.5
Total <sup>(2)</sup>	₩ 28,384	100.0%	₩ 26,504	100.0%	₩ 27,790	US\$ 26,036		100.0%

- (1) Includes Oceania, Africa and the Middle East.
- (2) Figures provided in this table include our revenue attributable to royalty and others.
- (3) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of ₩1,067.42 to US\$1.00, the noon buying rate in effect on December 31, 2017 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

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### ***Sales***

Our sales and marketing departments seek to maintain and strengthen relationships with our current customers in existing markets as well as expand our business in new markets and with new customers. We currently have wholly-owned sales subsidiaries in the United States, Japan, Germany, Taiwan, China and Singapore. As of December 31, 2017, our sales and marketing force employed a total of 1,545 employees in regional offices in these countries and in our head office in Korea.

The focus of our sales activities is on strengthening our relationships with large end-brand customers, with whom we maintain strong collaborative relationships. Customers look to us for a reliable supply of a wide range of display products. We believe our reliability and scale as a supplier helps support our customers' product positions. We view our relationships with our end-brand customers as important to their product development strategies, and we collaborate with our end-brand customers in the design and development stages of their new products. In addition, our sales teams coordinate closely with our end-brand customers' designated system integrators to ensure timely delivery. For each key customer, we appoint an account manager who is primarily responsible for our relationship with that specific customer, complemented by a product development team consisting of engineers who participate in meetings with that customer to understand the customer's specific needs.

We do not typically enter into binding long-term contracts with our customers. However, we have in place long-term supply and purchase agreements with certain major end-brand customers, whereby we and our end-brand customers agree on general volume parameters and, in some cases, product specifications and delivery terms. These agreements serve as an indication of the size and key components of a customer's order, and neither party is committed to supply or purchase any products until a firm purchase order is issued.

Our sales are conducted through our multi-channel sales and distribution network, including direct sales to end-brand customers and their system integrators, sales through our overseas subsidiaries and sales through our affiliated trading company, LG International, and its subsidiaries. Our sales subsidiaries procure purchase orders from, and distribute our products to, system integrators and end-brand customers located in their region. In regions where we do not have a sales subsidiary, or where doing so is consistent with local market practices, we sell our products to LG International and its subsidiaries. These subsidiaries of LG International process orders from and distribute products to customers located in their region. Sales to LG International and its subsidiaries amounted to 2.6% in 2017. See Item 7.B. Related Party Transactions for further discussion of these sales arrangements.

Our end-brand customers or their system integrators generally place purchase orders with us one month prior to delivery based on our non-binding supply and purchase agreements with them. Generally, the head office of an end-brand customer provides us with three- to six-month forecasts, which, together with our own forecasts, enable us to plan our production schedule in advance. Our customers usually issue monthly purchase orders containing prices we have negotiated with the end-brand customer one month prior to delivery, at which point the customer becomes committed to the order at the volumes and prices indicated in the purchase orders. Under certain special circumstances, however, a negotiated price may be subject to change during the one-month period prior to delivery.

Prices for our products are generally determined based on negotiations with our end-brand customers. Pricing of our display panel products is generally market-driven, based on the complexity of the product specifications and the labor and technology involved in the design or production processes.

We generally provide a limited warranty to our end-brand customers, including the provision of replacement parts and warranty services for our products. Costs incurred under our warranty liabilities consist primarily of repairs. We set aside a warranty reserve based on our historical experience and future expectations as to the rate and cost of claims

under our warranties.

Our credit policy typically requires payment within 30 to 90 days, and payments on the vast majority of our sales have typically been collected within 60 days. Where system integrators located in certain regions are invoiced directly, we have established certain measures, such as factoring arrangements and accounts receivable insurance programs, to protect us from excessive exposure to credit risks. To date we have not experienced any material problems relating to customer payments.

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### **Competition**

The display panel industry is highly competitive. Due to the capital intensive nature of the display panel industry and the high production volumes required to achieve economies of scale, the international market for display devices is characterized by significant barriers to entry, but the competition among the relatively small number of major producers is intense. In the case of TFT-LCD panel manufacturers, currently almost all of them are located in Asia, and we compete principally with manufacturers from Korea, Taiwan, China and Japan.

The principal elements of competition for customers in the display panel market include:

product portfolio range and availability;

product specifications and performance;

price;

capacity allocation and reliability;

customer service, including product design support; and

logistics support and proximity of regional stocking facilities.

Our principal competitors are:

Samsung Display in Korea;

Innolux and AU Optronics in Taiwan;

JDI and Sharp in Japan; and

BOE, China Star Optoelectronics, CEC Panda and HKC in China.

According to IHS Technology, in 2017, Korean display panel manufacturers had a market share of 43% of the 9-inch or larger panel market based on revenue, Taiwanese manufacturers had 28%, Chinese manufacturers had 23% and Japanese manufacturers had 7%. Our market share of the 9-inch or larger panel market based on revenue was approximately 29%.

### **Components, Raw Materials and Suppliers**



Components and raw materials accounted for 65.5% of our cost of sales in 2015, 66.4% in 2016 and 64.6% in 2017. The key components and raw materials of our display products include glass substrates, driver integrated circuits and polarizers used in both our TFT-LCD and OLED products, backlight units and liquid crystal materials used in our TFT-LCD products, and hole transport materials and emission materials used in our OLED products. We source these components and raw materials from outside sources, although, unlike many other display panel manufacturers, we produce a substantial portion of the color filters we use. With respect to glass substrates, Paju Electric Glass Co., Ltd., a joint venture company of which we and Nippon Electric Glass Co., Ltd. own 40% and 60%, respectively, provides us with a stable supply at competitive prices.

We generally negotiate non-binding master supply agreements with our suppliers several times a year, but pricing terms are negotiated on a quarterly basis, or if necessary, on a monthly basis. Firm purchase orders are issued generally six weeks prior to the scheduled delivery, except in the case of purchase orders for driver integrated circuits, which are issued generally six to ten weeks prior to the scheduled delivery. We purchase our components and raw materials based on forecasts from our end-brand customers as well as our own assessments of our end-brand customers' needs.

In order to reduce our component and raw material costs and our dependence on any one supplier, we generally develop compatible components and raw materials and purchase our components and raw materials from more than one source. However, we source certain key components and raw materials from a limited group of suppliers in order to ensure timely supply and consistent quality. Also, in order to facilitate implementation of our cost reduction strategies, we continually review for potential cost savings in sourcing our components and raw materials from suppliers based in Korea and those based abroad, including competitiveness of the prices offered by such suppliers and any potential for reduction in logistics and transportation costs. We perform periodic evaluations of our component and raw material suppliers based on a number of factors, including the quality and price of the components, delivery and response time, the quality of the services and the financial health of the suppliers. We reassess our supplier pool accordingly.

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We maintain a strategic relationship with many of our material suppliers, and from time to time, we make equity investments in our material suppliers as part of our efforts to secure a stable supply of key components and raw materials.

We generally maintain a component and raw material inventory sufficient for approximately 10 days, or 20 days for driver integrated circuits, as a safeguard against potential disruptions in supply.

In addition to components and raw materials, the manufacturing of our products requires significant quantities of electricity and water. In order to obtain and maintain reliable electric power and water supplies, we have our own back-up power generation facilities and water storage tanks as well as easy access to nearby water sources. To date we have not experienced any material problems with our electricity and water supplies.

## **Equipment, Suppliers and Third Party Processors**

We depend on a limited number of equipment manufacturers for equipment tailored to specific requirements. Since our manufacturing processes depend on the quality and technological capacity of our equipment, we work closely with the equipment manufacturers in the design process to ensure that the equipment meets our specifications. The principal types of equipment we use to manufacture display panels include deposition equipment, steppers, developers and coaters.

We purchase equipment from a small number of qualified vendors to ensure consistent quality, timely delivery and performance. We maintain strategic relationships with many equipment manufacturers as part of our efforts to ensure quality while reducing costs.

Historically, we have relied on a small number of overseas vendors for equipment purchases, but in recent years, we have diversified and localized our equipment purchases by shifting some of our purchases to local vendors. In 2017, approximately 69% of our equipment for our facilities in Korea was purchased from local vendors on an invoiced basis. We plan to maintain this localization effort as part of our sourcing diversification and cost reduction strategy. A large majority of the equipment purchased from overseas vendors are from Japanese vendors. From time to time, we use the services of LG International's subsidiary in Japan for logistics in connection with the procurement of equipment from Japan. See Item 7.B. Related Party Transactions.

Our engineers begin discussions with equipment manufacturers far in advance of the planned installation of equipment in a new fabrication facility, and we typically execute a letter of intent with the vendors in advance of our planned installation to ensure timely delivery of main equipment with long-term delivery schedules. Engineers from our vendors typically accompany the new equipment to our fabrication facilities to assist in the installation process to ensure proper operation. In addition, we outsource certain manufacturing processes to third party processors from time to time to supplement our processing capacity, and in certain cases, we maintain strategic relationships with such third party processors. For example, we have invested, and currently hold a 17.0% equity interest, in Avatec Co., Ltd., a third party processor that etches glass substrates.

## **Quality Control**

We believe that our advanced production capabilities and our reputation for high quality and reliable products have been important factors in attracting and retaining key customers. We have implemented quality inspection and testing procedures at all of our fabrication facilities and assembly facilities. Our quality control procedures are carried out at three stages of the manufacturing process:

incoming quality control with respect to components and raw materials;

in-process quality control, which is conducted at a series of control points in the manufacturing process; and

outgoing quality control, which focuses on packaging, delivery and post-delivery services to customers.

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With respect to incoming quality control, we perform quality control procedures for the raw materials and components that we purchase. These procedures include testing samples of large batches, obtaining vendor testing reports and testing to ensure compatibility with other components and raw materials, as well as vendor qualification and vendor rating. Our in-process quality control includes various programs designed to detect, as well as prevent, quality deviations, reduce manufacturing costs, ensure on-time delivery, increase in-process yields and improve field reliability of our products. We perform outgoing quality control based on burn-in testing and final visual inspection of our products and accelerated life testing of samples. We inspect and test our completed display panels to ensure that they meet our high production standards. We also provide post-delivery services to our customers, and maintain warranty exchange inventories in regional hubs to meet our customers' needs.

Our quality assurance team works to ensure effective and consistent application of our quality control procedures, which include six-sigma quality control procedures, and to introduce new methodologies that could further enhance our quality control procedures. Our quality assurance programs have received accredited ISO/TS 16949 certifications. The ISO/TS certification process involves subjecting our manufacturing processes and quality management systems to reviews and observation for various fixed periods. ISO/TS certification is required by certain European countries and the United States in connection with sales of industrial products in those countries, and provides independent verification to our customers regarding the quality control measures employed in our manufacturing and assembly processes.

**Insurance**

We currently have property insurance coverage, including business interruption coverage, for our production facilities in Gumi and Paju, Korea, for up to ₩2.7 trillion in the aggregate, and for our GP fabrication facility located in Guangzhou China for up to RMB 12.2 billion in the aggregate. We also have insurance coverage for work-related injuries to our employees, accidents during overseas business travel, damage during construction, damage to products and equipment during shipment, damage to equipment during installation at our fabrication facilities, automobile accidents, bodily injury and property damage from gas accidents, as well as mandatory unemployment insurance for our workers and director and officer liability insurance. In addition, we maintain general and product liability, employment practice liability, aviation product liability and world-wide cargo insurance. Our dormitories in Gumi and Paju, Korea, have fire insurance coverage for up to approximately ₩500 billion in the aggregate. Our subsidiaries also have insurance coverage for damage to office fixtures and equipment and life and disability insurance for their employees. All of our overseas manufacturing subsidiaries also carry property insurance, business interruption insurance and commercial general liability insurance.

**Environmental Matters**

Our production processes generate various forms of chemical and other industrial waste, waste water and greenhouse gas emissions at various stages in the manufacturing process. We have installed various types of anti-pollution equipment for the treatment and recycling of such waste products and aggressively engage in greenhouse gas emission reduction and energy conservation efforts.

As a member of the World Display device Industry Cooperation Committee, or WDICC, a TFT-LCD industry organization focusing on environmental issues, we have voluntarily agreed to reduce emission of greenhouse gases, such as nitrogen trifluoride, or NF<sub>3</sub>, and sulfur hexafluoride, or SF<sub>6</sub>, gases, by developing and adopting cost-effective abatement technologies and systems and increasing the number of abatement systems installed in our facilities. We installed NF<sub>3</sub> abatement systems at all of our production lines when the production facilities were being constructed. In addition, we have voluntarily installed SF<sub>6</sub> abatement systems in P61 and P7, and we have voluntarily developed processes that utilize substitute gases with lower global warming potential than SF<sub>6</sub> and have applied such processes

in P62, P8 and P9.

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In the case of the European Union's Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU, with the adoption of Directive (EU) 2015/863 in 2016, four additional substances (four phthalate substances) will be added to the six already restricted substances and the additional restrictions are scheduled to come into effect on July 22, 2019. In order to address the latent risk elements of the four phthalate substances scheduled to be restricted in 2019 and to establish a more stable management system, we implemented in 2016 a preemptive response process with respect to such four phthalate substances. In implementing this process, we collaborated with external agencies to ascertain regulatory trends and establish our response strategy, and we formulated and applied effective management measures through the collaborative efforts of our development, procurement and quality teams. Beryllium (Be) was not designated internationally as a mandatorily restricted substance but has continued to be the subject of discussion for restriction, and certain of our customers have designated it as a restricted substance not to be used in products. Accordingly, we have completed verification of the parts used in products for customers who have banned the use of beryllium. We have also conducted verification of the parts used in products for all customers who are expected to implement a ban and we have established a beryllium verification process for parts in development. Through such efforts, we have established a voluntary hazardous substance response process that can be expanded to products for all customers, not only those who have requested a response. For the more efficient operation of our waste water treatment equipment, we have also entered into an agreement with HiEntech, a wholly owned subsidiary of LG Electronics, for the operation of our water treatment system.

Operations at our manufacturing plants are subject to regulation and periodic scheduled and unscheduled on-site inspections by the Korean Ministry of Environment and local environmental protection authorities. We believe that we have adopted adequate anti-pollution measures for the effective maintenance of environmental protection standards consistent with local industry practice, and that we are in compliance in all material respects with the applicable environmental laws and regulations in Korea, including the Framework Act on Low Carbon, Green Growth, the Korean government, under which we are required to submit periodic greenhouse gas emission and energy usage statements, performance reports and greenhouse gas emission and energy usage reduction plans to the Korean government. Expenditures related to such compliance may be substantial and are generally included in capital expenditures. As required by Korean law, we employ licensed environmental specialists for each environmental area, including air quality, water quality, toxic materials and radiation.

We have been certified by the Korean Ministry of Environment as a Green Company, with respect to our environmental record for our P1 through P62 facilities and our module production plant in Gumi. In addition, we have received ISO 14001 and ISO 50001 certifications from the International Organization for Standardization with respect to our energy management systems for our P1 through P9 facilities and our Gumi and Paju module production plants. Our module production plants in Nanjing, Yantai and Guangzhou, China have also received ISO 14001 certification. Our GP1 fabrication facility was the first plant in China to receive the Green Plant designation under China's Green China Policy. Our GP1 fabrication facility has also received ISO 14001 and OHSAS 18001 certifications. Furthermore, in recognition of our continued water conservation activities (reuse system investments, etc.) and greenhouse gas emission reduction activities (process gas and energy reduction, etc.), we attained the highest level, Leadership A, and received the grand prize award at the CDP Water Korea Best Awards in 2016 from the Carbon Disclosure Project, which was presided over by the Carbon Disclosure Project Korea Committee. We also attained a Leadership A in the climate change information technology sector and received a Carbon Management Honors award in both 2016 and 2017. In 2017, in recognition of efficient control, management and operating systems implemented in our manufacturing facilities, we received the top-level certification, Level 1, under the Factory Energy Management System evaluation presided by the Korea Energy Agency.

**Joint Ventures**

We consider joint ventures an important part of our business, both operationally and strategically. We have used joint ventures to enter into new geographic markets, in particular China, to gain new customers and/or strengthen positions with existing customers and to procure certain components and raw materials. When entering new geographic markets where we do not have substantial local experience and infrastructure, teaming up with a local partner can reduce capital investment by leveraging the pre-existing infrastructure of local partners. In addition, local partners in these markets can provide knowledge and insight into local customs and practices and access to local suppliers of raw materials and components. All of these advantages can reduce the risk, and thereby enhance the prospects for the success, of an entry into a new geographic market. If the partner of the joint venture already has an established customer base, it can also be an effective means to acquire such new customers. Joint venture arrangements also allow us to access technology we would otherwise have to develop independently, thereby reducing the time and cost of development. They can also provide the opportunity to create synergies and applications of technology that would not otherwise be possible.

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From time to time, we have pursued a number of joint venture initiatives. For example, in September 2012, we entered into a joint venture agreement with Guangzhou GET Technologies Development Co., Ltd., or GET Tech, and Shenzhen SKYWORTH-RGB Electronic Co., Ltd., or Skyworth, establishing LG Display (China) Co., Ltd., which owns and operates our GP fabrication facility in Guangzhou, China. See Item 4.D. Property, Plants and Equipment Current Facilities. We acquired a 70.0% equity interest in LG Display (China) and invested a total of approximately US\$927 million over a period of two years from the date of incorporation of LG Display (China). Each of GET Tech and Skyworth owns a 20.0% and 10.0% equity interest in LG Display (China), respectively. In addition, we plan to establish a joint venture with the government of Guangzhou to construct a next generation large-sized OLED production line, which is expected to commence production in the second half of 2019, at our GP fabrication facility in Guangzhou, China, and we plan invest approximately ₩1.8 trillion to acquire a 70% ownership interest in such joint venture.

We intend to continue to seek strategic acquisition and joint venture opportunities and conduct feasibility studies with respect to establishing new manufacturing subsidiaries in strategic locations to deepen our market penetration, achieve economies of scale, increase our customer base, expand our geographical reach and reduce costs.

**Subsidiaries**

The following table sets forth summary information for our subsidiaries as of December 31, 2017:

Subsidiary	Main Activities	Jurisdiction of Organization	Date of Organization	Total Equity Investment	Percentage of Our Ownership Interest		
					Percentage of Our Ownership Interest	Percentage of Our Voting Power	
LG Display Taiwan Co., Ltd.	Sales	Taiwan	April 1999	NT\$	115,500,000	100%	100%
LG Display America, Inc.	Sales	U.S.A.	September 1999	US\$	411,000,000	100%	100%
LG Display Japan Co., Ltd.	Sales	Japan	October 1999	¥	95,000,000	100%	100%
LG Display Germany GmbH	Sales	Germany	November 1999		960,000	100%	100%
LG Display Nanjing Co., Ltd.	Manufacturing	China	July 2002	RMB	3,019,662,545	100%	100%
LG Display Shanghai Co., Ltd.	Sales	China	January 2003	RMB	4,138,650	100%	100%
LG Display Poland Sp. zo.o.	Manufacturing	Poland	September 2005	PLN	511,071,000	100%	100%
LG Display Guangzhou Co., Ltd.	Manufacturing	China	June 2006	RMB	1,654,693,079	100%	100%
LG Display Shenzhen Co., Ltd.	Sales	China	August 2007	RMB	3,775,250	100%	100%
LG Display Singapore Pte. Ltd.	Sales	Singapore	January 2009	SG\$	1,400,000	100%	100%
	Manufacturing	China	April 2010	RMB	1,007,720,600	100%	100%



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LG Display Yantai Co., Ltd.	and sales							
L&T Display Technology (Fujian) Ltd.	Manufacturing	China	January 2010	RMB	59,197,026	51%	51%	
Nanumnuri Co., Ltd.	Workplace services	Korea	March 2012	₩	800,000,000	100%	100%	
LG Display (China) Co., Ltd.	Manufacturing	China	December 2012	RMB	5,763,206,733	70%	70%	
Unified Innovative Technology, LLC	Managing intellectual property	U.S.A.	March 2014	US\$	9,000,000	100%	100%	
Global OLED Technology LLC	Managing intellectual property	U.S.A.	December 2009	US\$	138,010,000	100%	100%	
LG Display Guangzhou Trading Co., Ltd.	Sales	China	April 2015	RMB	1,223,960	100%	100%	
LG Display Vietnam Haiphong Co., Ltd.	Manufacturing	Vietnam	May 2016	VND	2,187,870,000,000	100%	100%	
Suzhou Lehui Display Co., Ltd.	Manufacturing	China	July 2016	RMB	636,973,641	100%	100%	
Money Market Trust	Money market trust	Korea	Not applicable	₩	61,470,000,000	100%		

N.B. See Note 1(b) of the notes to our financial statements for changes to our subsidiaries during the year ended December 31, 2017.

**Table of Contents****Item 4.C. Organizational Structure**

These matters are discussed under Item 4.B. where relevant.

**Item 4.D. Property, Plants and Equipment****Current Facilities**

The following table sets forth the size, location and primary use of our fabrication facilities.

<b>Fabrication Facility</b>	<b>Generation</b>	<b>Mass Production Commencement</b>	<b>Location</b>	<b>Gross Floor Area (in square meters)</b>	<b>Primary Types of Panels Produced</b>
P2 <sup>(2)</sup>	3.5	December 1997	Gumi, Korea	71,149	Automotive
P3 <sup>(3)</sup>	4	April 2000	Gumi, Korea	71,149	Mobile, Automotive
P4 <sup>(4)</sup>	5	March 2002	Gumi, Korea	93,277	Mobile, Notebook Computer, Desktop Monitor, Tablet Computer, Automotive
P5 <sup>(5)</sup>	5	May 2003	Gumi, Korea	93,277	Mobile, Notebook Computer, Automotive, Industrial
P61 <sup>(6)</sup>	6	August 2004	Gumi, Korea	288,602	Mobile, Desktop Monitor, Tablet Computer, Automotive
P62	6	April 2009	Gumi, Korea	101,607	Notebook Computer, Desktop Monitor, Television
P7	7	January 2006	Paju, Korea	312,048	Television, Desktop Monitor
P8 <sup>(7)</sup>	8	March 2009	Paju, Korea	542,795	Television, Desktop Monitor
P9 <sup>(8)</sup>	8	June 2012	Paju, Korea	455,439	Desktop Monitor, Notebook Computer, Tablet Computer
GP <sup>(9)</sup>	8	September 2014	Guangzhou, China	245,159	Television
Ochang <sup>(10)</sup>	2	January 2012	Ochang, Korea	7,129	OLED General Lighting, Automotive
E5	6	August 2017	Gumi, Korea	10,579	Mobile and other applications

(1) Based on internal reference to evolutions in facility design, material flows and input substrate sizes. There are several definitions of generations in the display industry. There has been no consensus in the display industry on a uniform definition. References to generations made in this annual report are based on our current definition of generations as indicated in the table below.

<b>Substrate Sizes (in millimeters)</b>	<b>Gen 2</b>	<b>Gen 3</b>	<b>Gen 4</b>	<b>Gen 5</b>	<b>Gen 6</b>	<b>Gen 7</b>	<b>Gen 8</b>
	370 x 470	550 x 650	680 x 880	1,000 x 1,200	1,500 x 1,800	1,870 x 2,200	2,200 x 2,500
		590 x 670	730 x 920	1,100 x 1,250	1,500 x 1,850	1,950 x 2,250	
		600 x 720		1,100 x 1,300			
		620 x 750		1,200 x 1,300			

- (2) We ceased production and closed P2 fabrication facility in June 2017.
- (3) We ceased production and closed P3 fabrication facility in February 2018.
- (4) We ceased production and closed P4 fabrication facility in October 2017.
- (5) Gross floor area of P5 fabrication facility includes gross floor area of OLED light production lines.
- (6) Gross floor area of P61 fabrication facility includes gross floor area of AP3 production line. We ceased production and closed P61 in June 2016 except for AP3 production line.
- (7) Gross floor area of P8 fabrication facility includes gross floor area of AP2, E2 and E3 production lines.
- (8) Gross floor area of P9 fabrication facility includes gross floor area of E4 production lines.
- (9) Gross floor area of GP fabrication facility includes gross floor area of extended facility.
- (10) Gross floor area of OLED light production facilities which we lease from LG Chem. We acquired the OLED light business from LG Chem in December 2015.

For input substrate size, initial design capacity and year-end input capacity as a result of ramp-up for each of our fabrication facilities, please see [Item 5.A. Operating Results Overview Manufacturing Productivity and Costs](#).

Housed within certain fabrication facilities, we also operate separately designated fabrication production lines. The following table sets forth the location and primary use of our separately designated production lines.

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Production Lines	Mass Production		Location	Primary Types of Panels Produced
	Generation <sup>(1)</sup>	Commencement		
AP2	4	July 2010	P8	LTPS backplanes for mobile
AP3	6	February 2014	P61	LTPS backplanes for mobile
E2	4	December 2013	P8	OLED mobile
E3	8	January 2013	P8	OLED television
E4	8	December 2014	P9	OLED television

(1) Based on internal reference to evolutions in facility design, material flows and input substrate sizes. We also currently operate module assembly facilities located in China (Nanjing, Guangzhou and Yantai), Korea (Gumi and Paju) and Poland (Wroclaw). In addition, we operate a research and development facility in Paju, Korea, which we refer to as the R&D Center. We opened the R&D Center in April 2012 to consolidate our research and development efforts for next-generation display technologies. The following table sets forth the size of our R&D Center and module assembly facilities.

Facility	Gross Floor Area (in square meters)	Mass Production Commencement
R&D Center	71,696	Not applicable (opened in April 2012)
Gumi assembly facility	301,779	January 1995
Nanjing assembly facility	150,760	May 2003
Paju assembly facility	226,758	January 2006
Wroclaw assembly facility	106,929	February 2007
Guangzhou assembly facility	139,095	December 2007
Yantai assembly facility	81,256	May 2010

**Capital Expenditures**

We are currently constructing our P10 fabrication facility, a next generation fabrication facility, in Paju, Korea, which is expected to be completed in the second quarter of 2018. We have completed the installation of our new E5 production line at our Gumi Display Cluster, on which we have commenced mass production of plastic OLED panels beginning in August 2017. Furthermore, in July 2017, we announced plans to make investments in an aggregate amount of ₩7.8 trillion in a next generation large-size OLED production line and a next generation plastic OLED production line in Paju, Korea. In April 2016, we commenced construction on a new module assembly facility in Haiphong, Vietnam, which was completed in July 2017. In addition, in July 2016, we announced plans to invest ₩2.0 trillion to install our new E6 production line at our P9 fabrication facility in Paju, Korea. We expect to commence mass production of flexible OLED panels on our new E6 production line in the second half of 2018. Each of our expansion and conversion projects is subject to market conditions and any changes in our investment timetable.

We currently expect that, in 2018, our total capital expenditures on a cash out basis will be higher than in 2017, primarily to fund the expansion of our panel production capacities for large-sized and small- and medium-sized OLED panels, including the construction of a next generation large-sized OLED production line at our GP fabrication facility in Guangzhou, China through our joint venture with the government of Guangzhou, and the construction of our P10 fabrication facility, a next generation large-size OLED production line and a next generation plastic OLED production line in Paju, Korea, while maintaining and making improvements to our existing facilities. This amount is subject to periodic assessment, and we cannot provide any assurance that this amount may not change materially after assessment. We may undertake further expansion projects in the future with respect to our existing facilities as our

overall business strategy may require.

**Item 4A. UNRESOLVED STAFF COMMENTS**

We do not have any unresolved comments from the SEC staff regarding our periodic reports under the Exchange Act.

**Item 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

**Item 5.A. *Operating Results*  
Overview**

Our results of operations are affected principally by overall market conditions, our manufacturing productivity and costs, and our product mix.

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**Table of Contents*****Market Conditions***

The display industry in which we operate is affected by market conditions that are often outside the control of individual manufacturers. Our results of operations might fluctuate significantly from period to period due to market factors, such as seasonal variations in demand, surges in production capacity by competitors and changes in technology. Over the past decade, the display industry has grown significantly as a result of cost reductions and product improvements that stimulated demand for TFT-LCD and OLED panels. With respect to the TFT-LCD industry, the industry grew from 586 million units in 2004 to 2,739 million units in 2017 and market revenue grew from US\$49 billion to US\$101 billion during the same period according to IHS Technology.

While TFT-LCD panels still predominantly constitute the display industry, the industry in recent years has witnessed the introduction of display panels based on new technologies, such as OLED technology, that have begun to compete with TFT-LCD panels. In particular, we and some of our competitors have already commenced mass production of OLED panels. Currently, small-sized panels for use in mobile devices such as smartphones make up the bulk of the OLED panel market, accounting for almost 94% of industry revenue from global sales of OLED panels in 2017. These small-sized OLED panels compete with more advanced TFT-LCD products such as our AH-IPS products. However, as of 2017, the OLED market was relatively small compared to the TFT-LCD market. According to IHS Technology, 430 million OLED panel units that are less than nine inches were sold in 2017, with market revenue of approximately US\$21 billion in that same year. We believe, however, that the market may change rapidly as a growing array of OLED panels for various applications are introduced to the market and advances in the related technology and manufacturing processes enable mass production in a cost-efficient manner. In December 2014, we commenced mass production of 55-inch, 65-inch and 77-inch Ultra HD OLED television panels on our E4 production lines. In addition, in August 2017, we began production of plastic OLED panels for smartphones on our newly constructed E5 production line.

While the display industry has grown rapidly, it has also experienced business cycles with significant and rapid price declines from time to time. Historically, display panel manufacturers have increased display area fabrication capacity rapidly. Capacity expansion occurs especially rapidly when several manufacturers ramp-up new factories at the same time. During such surges in the rate of supply growth, our customers are able to exert downward pricing pressure, leading to sharp declines in average selling prices and significant fluctuations in our gross margin. In addition, regardless of relative capacity expansion, we expect average selling prices of our existing products will decline as the cost of manufacturing declines due to technology advances and component cost reductions. Conversely, constraints in the industry supply chain or increased demand for new technology products have led to increased prices for display panels in some past periods.

According to IHS Technology, the display industry for panels that are nine inches or larger contracted in 2016 compared to 2015, with total market revenue decreasing from US\$64 billion in 2015 to US\$60 billion in 2016. The average selling price of those panels decreased during the same period by 4.4% from approximately US\$91 in 2015 to US\$87 in 2016. In 2017, the display industry for panels that are nine inches or larger expanded, with total market revenue increasing to US\$67 billion. IHS Technology estimates that the average selling price of those panels has increased during the same period by approximately 10% to approximately US\$96 in 2017.

We strive to mitigate the effect of industry cyclicity and the resulting price fluctuations by planning capacity expansions and capacity allocations, or shifting our product mix, to capture premium prices in specific emerging product categories. As part of our strategy, we have been proceeding with the construction of new fabrication facilities and additional investments to upgrade and convert existing facilities and production lines to produce differentiated specialty display panels based on newer technologies that command higher premiums. See Item 4.D. Property, Plants and Equipment Capital Expenditures.

In addition, we are vigorously pursuing our strategy to develop differentiated specialty products and technologies that better address our customers' needs, thereby delivering greater value to our customers. In many cases, these efforts go hand-in-hand with our efforts to develop products based on new technologies that allow us to realize greater premiums. For example, we have allocated greater amounts of our resources to the development and production of OLED panels, public display panels, display panels utilizing AH-IPS technology for various tablet computers, smartphones, notebook computers, desktop monitors and other applications and flexible OLED technology for smartphones and smartwatches. In particular, we are deploying greater resources into large-sized OLED television panels in order to maintain our early competitive edge in such market, and into small- and medium-sized OLED panels for various applications in order to expand our market presence.

Another key aspect of our strategy is to foster close cooperation with our customers and build on our strategic relationships with many of our key suppliers. Success of a new product depends on, among other things, working closely with our customers to gain insights into their product needs and to understand general trends in the market. At the same time, we often work with our equipment suppliers to design equipment that can enhance the efficiency of our production processes for such new products.

**Table of Contents****Manufacturing Productivity and Costs**

We seek to continually enhance our manufacturing productivity and thereby reduce the cost of producing each panel. We have significantly expanded our production capacity by investing in fabrication facilities that can process increasingly larger-size glass substrates. The following table shows the input substrate size, initial design capacity and year-end input capacity as a result of ramp-up for each of our fabrication facilities as of the dates indicated:

Facility	Initial		Year-end Input Capacity <sup>(1)</sup>		
	Primary Input Substrates Size (in millimeters)	Design Capacity (in input substrates per month)	2015	2016	2017
			(in input substrates per month)		
P2 <sup>(2)</sup>	590x670	60,000	76,000	38,000	42,000
P3 <sup>(3)</sup>	680x880	60,000	67,000	32,000	37,000
P4 <sup>(4)</sup>	1,000x1,200	60,000	98,000	92,000	27,000
P5	1,100x1,250	60,000	126,000	82,000	69,000
P61 <sup>(5)</sup>	1,500x1,850	90,000	93,000	75,000	36,000
P62	1,500x1,850	60,000	46,000	50,000	49,000
P7	1,950x2,250	90,000	227,000	229,000	230,000
P8 <sup>(6)</sup>	2,200x2,500				
		339,000	384,000	362,000	359,000
	730x920				
P9	2,200x2,500	60,000	50,000	60,000	68,000
GP <sup>(7)</sup>	2,200 x 2,500	60,000	96,000	151,000	211,000
Ochang <sup>(8)</sup>	370 x 470	4,000	1,000	2,500	3,000
E5 <sup>(9)</sup>	1,500x925	16,265	N/A	N/A	6,289

N/A = Not applicable.

(1) Year-end input capacity is the total input substrates for the month that had the highest monthly input substrates during the fiscal year.

(2) We ceased production and closed P2 fabrication facility in June 2017.

(3) We ceased production and closed P3 fabrication facility in February 2018.

(4) We ceased production and closed P2 fabrication facility in October 2017.

(5) Includes input capacity of AP3 production line. We otherwise ceased production and closed P61 in June 2016 except for AP3 production line.

(6) Includes input capacity of AP2, E2, E3 and E4 production lines.

(7) Includes input capacity of extended GP1 production line from 2016.

(8) Year-end input capacity for 2015 represents the total input substrates after our acquisition of the OLED light business from LG Chem in December 2015.

(9) Commenced operation in August 2017.

Our cash outflows for capital expenditures amounted to ₩2,365 billion in 2015, ₩3,736 billion in 2016 and ₩6,592 billion (US\$6,176 million) in 2017. Such capital expenditures relate mainly to continued investments in our



GP fabrication facility and E4 production line in 2015, continued investments in our GP fabrication facility, the construction of our P10 fabrication facility in Paju, Korea and investments in our E5 and E6 production lines in 2016 and 2017, as well as investments in a next generation large-size OLED production line and a next generation plastic OLED production line in Paju, Korea in 2017. Capital expenditures were also incurred for the acquisition of new equipment during the same period. Our depreciation expense as a percentage of revenue decreased from 10.5% in 2015 to 10.0% in 2016 and remained stable at 10.0% in 2017. The decrease in 2016 compared to 2015 was primarily due to the end of the estimated useful life of certain machinery and equipment assets in our P9 fabrication facility. We currently expect that, in 2018, our total capital expenditures on a cash out basis will be higher than in 2017, primarily to fund the expansion of our panel production capacities for large-sized and small- and medium-sized OLED panels, including the construction of a next generation large-sized OLED production line in Guangzhou, China through our joint venture with the government of Guangzhou, as well as our continued investment in a next generation large-size OLED production line and a next generation plastic OLED production line in Paju, Korea, while maintaining and making improvements to our existing facilities. This amount is subject to periodic assessment, and we cannot provide any assurance that this amount may not change materially after assessment.

Since inception we have designed our fabrication facilities in-house and co-developed most equipment sets with our suppliers. These efforts have enabled us to gain valuable experience in designing and operating next-generation fabrication facilities capable of processing increasingly larger-size glass substrates. We have been able to leverage this experience to achieve and maintain high production output and yields at our fabrication facilities, thereby lowering costs. In addition, in recent years, we have substituted a portion of our equipment purchased from overseas vendors with purchases from local vendors to diversify our supply source and reduce costs. For example, in 2017, we purchased approximately 69% of our equipment for our facilities in Korea from local suppliers on an invoiced basis. We also fabricate certain components internally, such as color filters, which are one of the industry's higher-cost components.

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We also continue to make various process improvements at our fabrication facilities, including enhancing the performance of process equipment, efficiency of material flows and quality of process and product designs. For example, we have reduced the number of mask steps in the TFT process from four to three with respect to certain models, thereby enabling us to process a higher number of substrates in a given period of time. Such process improvements result in increased unit output of our fabrication facilities without significant capital investment, thus enabling us to reduce fixed costs on a per panel basis. In addition, in commencing mass production of large-sized OLED products, we have made modifications to certain of our existing TFT-LCD production lines to convert them into OLED panel production lines. Because our large-sized OLED panels employ oxide TFT backplane technology, which can be produced using manufacturing processes similar to the processes used to manufacture TFT-LCD panels, relatively little modification has been necessary, thereby reducing the costs of additional investments needed for the conversion of our production lines.

Raw materials comprise the largest component of our costs. We monitor the prices at which we can procure raw materials from suppliers and to the extent overseas suppliers are able to provide raw materials at competitive prices, we have diversified our supplier base by procuring raw materials from such overseas suppliers. We have also been able to leverage our scale and leading industry position to obtain competitive prices from our suppliers. Certain strategic decisions, such as fabricating our own color filters, one of the higher cost components, have also been important drivers of our cost control.

The size of our operations has also expanded considerably from 2002 to date, enabling us to benefit from economies of scale. As a result of the above factors, our cost of sales per square meter of net display area, which is derived by dividing total costs of sales by total square meters of net display area shipped, decreased by 9.0% from ₩608,415 in 2015 to ₩553,935 in 2016 and further decreased by 2.7% to ₩538,806 (US\$505) in 2017.

***Product Mix***

Our product mix reflects our strategic capacity allocation among various product markets, and is continually reviewed and adjusted based on the demand for, and our assessment of the profitability of, display panels in different markets and size categories. In recent years, we believe market demand has been shaped by a shift toward larger-sized panels, especially in the television and desktop panel markets, and a shift toward differentiated specialty products based on newer technologies, especially in the display panel markets for Ultra HD televisions, ultra-thin notebooks, tablet computers and smartphones. In response to such market trends, we have increased our production capacity and sales of larger-sized panels, as well as developing and commercializing differentiated specialty products for a variety of applications. For example, with respect to our television display panel product portfolio, the proportion of sales of our 55-inch and 65-inch television panels in our product mix increased between 2015 and 2017. In addition, with respect to our desktop monitor products, we have expanded our product portfolio to offer panels with Full HD resolution ranging from 21.5 inches to 37.5 inches in a variety of screen aspect ratios, including 21:9 screen aspect ratio for ultra-widescreen monitors, in order to capture the market for large-size desktop monitors. At the same time, in response to increasing market demand for differentiated specialty products, we have developed and commercialized, for example, tablet computer panels utilizing AH-IPS technology with increasingly higher resolution and other features, smartphone and smartwatch panels utilizing flexible OLED technology and large-sized television panels utilizing our Ultra HD and OLED technologies.

The following table sets forth our revenue by product category for the years indicated and revenue in each product category as a percentage of our total revenue:

	Year ended December 31,						
	2015		2016		2017		
	Sales	%	Sales	%	Sales	Sales <sup>(3)</sup>	%
Panels for:	(in billions of Won and millions of US\$, except for percentages)						
Televisions	₩ 10,854	38.2%	₩ 10,133	38.2%	₩ 11,718	US\$ 10,978	42.2%
Notebook computers	2,509	8.8	2,384	9.0	2,244	2,102	8.1
Desktop monitors <sup>(1)</sup>	4,553	16.0	4,035	15.2	4,393	4,116	15.8
Tablet computers	2,510	8.8	2,696	10.2	2,370	2,220	8.5
Mobile and other applications <sup>(2)</sup>	7,919	27.9	7,216	27.2	7,020	6,577	25.3
Sales of goods	₩ 28,345	99.9%	₩ 26,464	99.8%	₩ 27,745	US\$ 25,993	99.8%
Royalties and others	39	0.1	40	0.2	45	42	0.2
Revenue	₩ 28,384	100.0%	₩ 26,504	100.0%	₩ 27,790	US\$ 26,035	100.0%

(1) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.

(2) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.

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(3) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of ₩1,067.42 to US\$1.00, the noon buying rate in effect on December 31, 2017 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

The following table sets forth our sales volume by product category for the years indicated and as a percentage of our total panels sold:

Panels for	Year ended December 31,					
	2015		2016		2017	
	Number of Panels	%	Number of Panels	%	Number of Panels	%
	(in thousands, except for percentages)					
Televisions	55,319	14.2%	52,916	16.0%	52,108	18.1%
Notebook computers	45,509	11.6	39,672	12.0	26,999	9.4
Desktop monitors <sup>(1)</sup>	41,912	10.7	40,001	12.1	37,000	12.8
Tablet computers	31,476	8.1	24,957	7.5	26,255	9.1
Mobile and other applications <sup>(2)</sup>	216,565	55.4	173,166	52.4	146,162	50.7
Total	390,781	100.0%	330,712	100.0%	288,524	100.0%

(1) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.

(2) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.

**Average Selling Prices**

Our product mix has an impact on our average selling prices. In addition to business cycles, industry-wide supply and demand balances and other market- or industry-wide variables, our product cost and price vary with the product display area, as well as the technology and specification of such product. Therefore, the average selling price of our products can vary over time as a result of business cycles and the choices we make in capacity allocation for specific products. The overall average selling price of our display panels can fluctuate significantly. Our average selling price per panel, which is derived by dividing total sales of goods by the total number of panels sold, increased by 10.3% from ₩72,534 in 2015 to ₩80,021 in 2016 and further increased by 20.2% to ₩96,162 (US\$90) in 2017. In 2016 compared to 2015, our average selling price increased primarily due to a general increase in the selling prices of primarily small- and medium-sized higher-end products sold during the same period, which was primarily attributable to an increase in demand for higher-end products from our customers. In 2017 compared to 2016, our average selling price further increased primarily due to an increase in the average selling price for large-sized panels, which was mainly attributable to a continued increase in demand for higher-end products from our customers.

The following table sets forth our average selling price per panel by markets for the years indicated:

	Average Selling Price <sup>(3)</sup>			
	Year ended December 31,			
	2015	2016	2017 <sup>(4)</sup>	
Televisions	₩ 196,207	₩ 191,492	₩ 224,879	US\$ 211
Notebook computers	55,132	60,093	83,114	78
Desktop monitors <sup>(1)</sup>	108,632	100,872	118,730	111
Tablet computers	79,743	108,026	90,269	85
Mobile and other applications <sup>(2)</sup>	36,566	41,671	48,029	45
All panels	72,534	80,021	96,162	90

(1) Includes desktop monitors manufactured and sold by our joint venture company L&T Display Technology (Fujian) Limited.

(2) Includes, among others, panels for mobile devices, including smartphones and other types of mobile phones, and industrial and other applications, including entertainment systems, automotive displays, portable navigation devices and medical diagnostic equipment.

(3) Average selling price for each market represents revenue per market divided by unit sales per market.

(4) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of ₩1,067.42 to US\$1.00, the noon buying rate in effect on December 31, 2017 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

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Our average revenue per square meter of net display area, which is derived by dividing our total revenue by total square meters of net display area shipped, decreased by 10.1% from ₩717,470 per square meter of net display area in 2015 to ₩645,222 in 2016. In 2017, our average revenue per square meter of net display area shipped increased by 3.5% to ₩667,726 (US\$626).

**Critical Accounting Policies**

We have prepared our consolidated financial statements in accordance with IFRS as issued by the IASB. These accounting principles require us to make certain estimates and judgments that affect the reported amounts in our consolidated financial statements. Our estimates and judgments are based on historical experience, forecasted future events and various other assumptions that we believe to be reasonable under the circumstances. Estimates and judgments may differ under different assumptions or conditions. We evaluate our estimates and judgments on an ongoing basis. We believe the critical accounting policies discussed below are the most important to the portrayal of our financial condition and results of operations. Each of them is dependent on projections of future market conditions and they require us to make the most difficult, subjective or complex judgments. For a further description of the significant accounting policies and methods used in the preparation of our consolidated financial statements and new standards and amendments not yet adopted, see Note 3 of the notes to our financial statements.

***Inventories***

We state our inventory at the lower of cost and net realizable value. We make adjustments to reduce the cost of inventory to its net realizable value, if required, for estimated excess, obsolescence or impaired balances. Factors influencing these adjustments include changes in demand, technological changes, product life cycle, component cost trends, product pricing, and physical deterioration. Revisions to these adjustments would be required if these factors differ from our estimates. If future demand or market conditions for our products are less favorable than forecasted, we may be required to recognize additional write-downs, which would negatively affect our results of operations in the period in which the write-downs are recognized. The write-downs of inventories decreased by 43.9% from ₩364 billion as of December 31, 2015 to ₩204 billion as of December 31, 2016 and remained relatively constant at ₩206 billion (US\$194 million) as of December 31, 2017. The decrease as of December 31, 2016 compared to as of December 31, 2015 was due to the disposal in 2016 of inventories for which devaluations were reflected in the prior year. The amount of any such adjustment is recognized as cost of sales in the period for which the assessment relates.

***Income Taxes***

We have significant deferred income tax assets that may be used to offset taxable income in future periods. Our ability to utilize deferred income tax assets is dependent on our ability to generate future taxable income sufficient to utilize these deferred income tax assets before their expiration. Changes in estimates of our ability to realize our deferred tax assets are generally recognized in earnings as a component of our income tax (benefit) expense. At each reporting date, we review our deferred tax assets for recoverability considering historical profitability, projected future taxable income, the expected timing of reversals of existing temporary differences and expiration of unused tax losses and tax credits. If we are unable to generate sufficient future taxable income, or if we are unable to identify suitable tax planning strategies, the deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realized. An increase in unrecognized deferred tax assets would result in an increase in our effective tax rate and could materially adversely impact our operating results. Conversely, if conditions improve and we determine that previously unrecognized deferred tax assets should be recognized because of changes in estimates of future taxable income or other conditions that affect our expected recovery of deferred tax assets, this would result in an increase in reported earnings in such period. In 2016, we did not recognize ₩73 billion of deferred tax assets comprising tax credit carryforwards as it was no longer probable that such deferred tax assets would be utilized due to

changes in estimates of future taxable income. In 2017, we reversed ₩12 billion (US\$11 million) of such previously unrecognized tax credit carryforwards as it became probable that sufficient taxable profit would be available in light of improved market conditions. See Note 23 of the notes to our financial statements. If the unrecognized deferred tax assets are recognized as deferred tax assets in a future period, the effective tax rate for the period could decrease. In estimating projected future taxable income, we considered a variety of factors, including recent overcapacity issues in the display industry and the industry-wide response to scale back capacity expansion plans and adjust utilization rates, as well as trends in demand for display products.

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**Table of Contents*****Provisions Warranty Obligations***

We recognize a provision for warranty obligations based on the estimated costs that we expect to incur under our basic limited warranty for our products. This warranty covers defective products and is normally valid for eighteen months from the date of purchase. These liabilities are accrued when product revenue are recognized. Warranty costs primarily include raw materials and labor costs. Factors that affect our warranty liability include historical and anticipated rates of warranty claims on repairs, calculated based on our sales volume and cost per claim to satisfy our warranty obligation. There were no changes in assumptions or methods used which had a significant impact on the amount of warranty obligations from 2015 to 2017. As these factors are impacted by actual experience and future expectations, we periodically assess the adequacy of our recorded warranty liabilities and adjust the amounts as necessary. We recognized warranty obligations amounting to ₩56 billion, ₩62 billion and ₩102 billion (US\$96 million) as of December 31, 2015, 2016 and 2017, respectively. Warranty expenses increased from ₩147 billion in 2015 to ₩167 billion in 2016 and further increased to ₩251 billion (US\$236 million) in 2017. The increases in 2016 compared to 2015 and in 2017 compared to 2016 were both attributable primarily to higher quality expectations for panel products.

***Long-Lived Assets: Useful Lives, Valuation and Impairment***

Property, plant and equipment are recorded at cost less accumulated depreciation over the estimated useful lives of the individual assets, with depreciation calculated on a straight line basis. The determination of an asset's useful life and salvage value requires judgment based on our historical and anticipated use of the asset. Since 1999, all new machinery is being depreciated on a straight-line basis over four or five years. For goodwill and other intangible assets that have indefinite useful lives or that are not yet available for use, as the case may be, the recoverable amount is estimated each year at the same time irrespective of whether there is any indication of impairment.

We review the carrying amounts of long-lived assets or cash-generating units at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the recoverable amount of the relevant asset or cash generating unit is estimated. If circumstances require that a long-lived asset or cash-generating unit be tested for possible impairment, and the carrying value of such long-lived asset or cash-generating unit is considered impaired after such test, an impairment charge is recorded for the amount by which the carrying value of the long-lived asset or cash-generating unit exceeds its estimated recovery value. The recoverable amount of a long-lived asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. Fair value is determined by employing a variety of valuation techniques as necessary, including discounted cash flow models, quoted market values and third-party independent appraisals. The determination of the value in use and the fair value requires our judgments and assumptions about future operations. The determination of an asset's useful life, and the potential impairment of our long-lived assets could have a material effect on our results of operations. We recognized impairment losses of ₩3.3 billion in 2015, ₩1.7 billion in 2016 and ₩1.8 billion (US\$1.7 million) in 2017.

***Employee Benefits***

Our accounting for employee benefits, which mainly consists of our defined benefit plan, involves judgments about uncertain events including, but not limited to, discount rates, life expectancy and future pay inflation. The discount rates are determined by reference to the yield at the reporting date on high quality corporate bonds that have maturity dates approximating the terms of our benefits obligations and that are denominated in the same currency in which the benefits are expected to be paid. Due to changing market and economic conditions, the underlying key assumptions may differ from actual developments and may lead to significant changes in our defined benefit plan. We immediately recognize all actuarial gains and losses arising from defined benefit plans in retained earnings.



***Provisions Legal Proceedings***

We are involved from time to time in certain routine legal proceedings and governmental investigations incidental to our business. See Item 8.A. Consolidated Statements and Other Financial Information Legal Proceedings. We recognize provisions for claims, assessments, litigation, fines, and penalties and other sources when there is a present or constructive obligation arising from a past event, it is more likely than not that an outflow of our resources will result to settle the obligation, and a reliable estimate can be made of the amount of the obligation. In determining whether a provision should be recognized, we evaluate, among other factors, whether it is more likely than not that our defense to a claim will be successful and if it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation. We estimate the amount of loss, considering factors such as the nature of the litigation, claim, or assessment, the progress of the case and the opinions or views of legal counsel and other advisers. These estimates have been based on our assessment of the facts and circumstances at each reporting date and are subject to change based upon new information and intervening events. Revisions to estimates may significantly impact future net income. We recognized provisions for litigation and claims amounting to ₩61 billion, nil and less than ₩0.1 billion in the statements of financial position as of December 31, 2015, 2016 and 2017, respectively. Legal costs incurred in connection with loss contingencies are expensed as incurred.

**Table of Contents****Operating Results**

The following presents our consolidated results of operation information and as a percentage of our revenue for the years indicated:

	2015		2016		2017		2017 <sup>(1)</sup>	
	₩	%	₩	%	₩	US\$		%
	<b>Year ended December 31,</b>							
	<b>(in billions of Won and in millions of US\$, except for percentages)</b>							
Revenue	₩ 28,384	100.0%	₩ 26,504	100.0%	₩ 27,790	US\$ 26,035		100.0%
Cost of sales	(24,070)	84.8	(22,754)	85.9	(22,425)	(21,009)		80.7
Gross profit	4,314	15.2	3,750	14.1	5,366	5,027		19.3
Selling expenses	(878)	3.1	(695)	2.6	(994)	(931)		3.6
Administrative expenses	(593)	2.1	(610)	2.3	(696)	(652)		2.5
Research and development expenses <sup>(2)</sup>	(1,218)	4.3	(1,134)	4.3	(1,213)	(1,136)		4.4
Other income	1,274	4.5	1,592	6.0	1,082	1,014		3.9
Other expenses	(1,327)	4.7	(1,468)	5.5	(1,230)	(1,152)		4.4
Finance income	159	0.6	140	0.5	279	261		1.0
Finance costs	(316)	1.1	(266)	1.0	(269)	(252)		1.0
Equity income on investments, net	19	0.1	7	0.0	10	9		0.0
Profit before income tax	1,434	5.1	1,316	5.0	2,333	2,186		8.4
Income tax expense	(411)	1.4	(385)	1.5	(396)	(371)		1.4
Profit for the year	1,023	3.6	931	3.5	1,937	1,815		7.0

(1) For convenience, the Korean Won amounts are expressed in U.S. dollars at the rate of ₩1,067.42 to US\$1.00, the noon buying rate in effect on December 31, 2017 as certified by the Federal Reserve Bank of New York for customs purposes. This translation should not be construed as a representation that the Korean Won amounts represent, have been or could be converted to U.S. dollars at that rate or any other rate.

**Comparison of 2017 to 2016****Revenue**

Our revenue increased by 4.9% from ₩26,504 billion in 2016 to ₩27,790 billion (US\$26,035 million) in 2017. The increase in revenue resulted from increases in revenue derived from sales of panels for televisions and for desktop monitors, which were in turn due to an increase in their average selling prices, offset in part by a decrease in revenue derived from sales of panels for notebook computers, tablet computers and mobile and other applications. In particular:

The number of units sold of our large-sized television panels, comprising 42-inch and larger panels, which category includes four of our five top selling television panels in 2017 in terms of sales volume, namely 43-inch, 49-inch, 55-inch and 65-inch panels, increased by 3.1% from approximately 41.7 million panels in 2016 to approximately 43.0 million panels in 2017. The average selling price for

those panels also increased, together resulting in a significant increase in revenue derived from those panels. The increase in revenue derived from our large-sized television panels more than offset a decrease in revenue derived from our small- and medium-sized television panels during the same period, which was due to a decrease in the number of those panels sold, resulting in an overall increase in revenue from television panels.

Demand for our 15.6-inch or smaller notebook computer panels, which category includes three of our top selling notebook computer panels in terms of sales volume, namely 13.3-inch, 15.4-inch and 15.6-inch panels, fell in 2017 compared to 2016, resulting in a significant decrease in the number of those panels sold by 32.0% from approximately 38.7 million panels in 2016 to approximately 26.3 million panels in 2017. The decrease in the number of those panels sold more than offset a significant increase in the average selling price of those panels during the same period, resulting in a decrease in revenue derived from those panels.

The number of units sold of our large-sized desktop monitor panels, comprising 21.5-inch and larger panels, which category includes four of our five top selling desktop monitor panels in terms of sales volume, namely 21.5-inch, 23-inch, 23.8-inch and 27-inch panels, decreased by 2.4% from approximately 33.0 million panels in 2016 to 32.2 million panels in 2017. However, the decrease in the number of those panels sold was more than offset by an increase in the average selling price of those panels during the same period, resulting in an overall increase in revenue derived from those pa