MANAGEMENT DISCUSSION AND ANALYSIS

Overall KCE Group's Operating Performance in 2016

Fiscal 2016 – a new chapter for KCE's performance: Revenue and earnings continued to be strong Q-o-Q and for the full year. Phase 1 & 2 of the new plant ramped up its capacity to the highest utilization rate as a result of increased orders and the completed transfer of capacity from the old plant. The improved profitability was driven by 1) sales growth of 10.8% from previous year and 2) a record-high gross margin of 36% supported by the plant achieving a high level of production efficiency, resulted in a much better economies of scale.

A summary of the Company's operating performance in 2016 and 2015 is shown in the following table:

	FY2016	FY2015	Change	FY2014	Change
			Y-O-Y		Y-o-Y
[Amount: THB million]			[2016 vs. 2015]		[2015 vs. 2014]
Sales Revenue	13,797.5	12,448.7	+ 10.8%	11,284.3	+ 10.3
Cost of Sales	8,985.0	8,535.0		7,717.6	
Gross Margin	34.9%	31.4%		31.6%	
Selling & Administration Exp.	1,694.9	1,520.4		1,682.5	
Operating Profit*	2,912.8	2,192.2	+ 32.9%	1,798.1	+ 21.9
	21.1%	17.6%		15.9%	
Net Profit	3,038.7	2,240.1	+ 35.7%	2,109.8	+ 6.2
	22.0%	18.0%		18.6%	

[Operating profit* excludes foreign exchange rate effects]

Revenues Analysis

Sales and service income

Consolidated sales revenue rose from Bt12,448 million in 2015 to Bt13,797 million in 2016, representing growth of approximately 11% in Baht terms. The increase was primarily due to higher production volumes supported by an increase in capacity utilization from Phase 1 & 2 at the new plant. However, sales revenue growth was partially affected by the Baht's exchange rate and a change in commercial terms to a consignment basis with some key customers, which thereby caused a delay in revenue realization of the current fiscal year to the next year.

Quarterly sales revenue

Sales reached a new high with quarterly revenues from sales in dollar terms as follows:

[Unit: USD million]

		2016	2015	2014	2013	2012		
	Quarter 1	99.7	88.7	79.2	67.4	43.6		
	Quarter 2	102.2	92.0	80.8	76.0	48.4		
	Quarter 3	101.6	94.0	87.9	81.0	56.3		
	Quarter 4	90.6	<u>90.2</u>	77.5	<u>79.0</u>	<u>61.2</u>		
		<u>394.0</u>	<u>364.9</u>	<u>325.4</u>	<u>303.4</u>	<u>209.4</u>		
Sales b	Sales by layer count proportion was as follows:							
(% Sq	ft)							
		2016	2015	2014	2013	2012		
	Double-sided PCBs	25.7%	26.6%	29.0%	28.9%	29.7%		
	4 Layer PCBs	52.1%	51.7%	51.6%	51.4%	55.1%		
	6+ Layer PCBs	22.2%	21.7%	19.5%	19.7%	15.2%		
Sales o	Sales distribution by territory was as follows:							
(Unit: %	% to total sales)							
		2016	2015	2014	2013	2012		
	Europe	54.9%	55.1%	55.5%	54.7%	62.0%		
	United States	16.1%	18.6%	18.6%	<u>ہ</u> 20.7%	16.7%		
	Asia	21.7%	20.3%	20.6%	<i>б</i> 19.9%	17.8%		
	Local	7.4%	6.0%	5.2%	4.7%	3.5%		
•	Other income							
Other i	Other income was as follows:							
(Unit: E	Baht million)							
			2016	2015	2014	2013 2012		
Sa	ales of scrap materials		26.4	24.5	42.7	39.0 28.7		
Gains from forex and hedging		125.9	47.9	95.5	89.3 159.0			
Ot	ther miscellaneous inco	ome	28.3	<u>10.0</u>	<u>15.7</u>	<u>17.9</u> <u>43.2</u>		
	Total Other Income		<u>180.6</u>	<u>82.4</u>	<u>153.9</u>	<u>146.2</u> <u>230.9</u>		

Cost of Sales/ Gross Margin Analysis

In 2016, cost of sales decreased to an average of 66.1% of sales, from 68.6% in 2015, resulting in the gross profit margin increased from 31.4% in 2015 to 34.9% on average in 2016, and reached a record-high 36.0% in 3Q16. The lower cost of goods was largely due to higher economies of scale following the increase in efficiency at the new plant while processed scrap was maintained at a low rate, and various continuous cost control measures, despite pressure from Baht appreciation.

Sales and Administrative Expenses Analysis

Selling expense was 4.1% of total sales, or Bt568 million in 2016, compared to 4.4% of total sales, or Bt552 million in 2015. As much as 80% of the total selling expense grew at the same proportion as sales, including freight and insurance costs, sales commissions for overseas sales representatives, carton and packaging costs, and other costs that are variable and linked to sales. The remaining 20% accounted for other fixed expenses – sales staff costs, product liability and recall insurance premiums, sample products, reject/returns and sorting costs, and miscellaneous sales office expenses.

Administrative expense covers mostly fixed expenses, i.e., administrative staff costs, staff welfare and benefits, general repair and maintenance costs, contracted software maintenance, utilities costs, security and safety expenses, traveling expenses, communication expenses, transportation costs, legal consulting and auditing fees, property and all-risk insurance costs, and R&D expenditure. It also includes depreciation cost (on non-production assets), allowances (reversal) for doubtful accounts, and losses from fixed asset write-offs and other general administrative expenses.

In 2016, administrative expenses totaled Bt1,127 million, from Bt968 million in the previous year. Administrative expense increased mainly as a result of higher staff costs in line with better plant performance and the associated expense from Employee Joint Investment Program for KCE's Management and Employees, which has started since July in the current year. In addition, a subsidiary of the Company booked an impairment allowance of Bt57 million on replaced machinery under an Efficiency Improvement Project.

Operating Profit/ Net Profit

In 2016, Operating profit for full-year 2016 rose significantly by 32.9% from 2015, which was on top of an increase of 21.9% in 2015 from 2014. Normalized operating profit was Bt2,913 million,

compared to Bt2,192 million in the previous year, whic was the result of the sales growth and the increased efficiency at the new plant, resuled in a low cost of goods and increased gross profit margin rate. However, there was an effect from changing foreign currency exchange rates and a one-off tax expense of approximately Bt22 million related to insurance income from the prior year.

The Group reported a consolidated net profit of Bt 3,039 million for FY2016, or a 35.7% increase from Bt2,240 million in FY2015. The improved profitability was the result of increased efficiency following capacity expansion at the new plant, sales growth, and partly an effect from changing foreign currency exchange rates, whereas the gross margin widened and SG&A remained stable.

This resulted in an increase in basic earnings per share from Bt3.93 for 2015, to Bt5.23 for 2016.

Financial Status

Assets

According to KCE's consolidated financial statement, total assets as of Dec. 31, 2015 amounted to Bt17,327 million, consisting of current assets of Bt7,296 million; property, plant and equipment of Bt9,333 million net; intangible assets of Bt329 million; goodwill of Bt117 million; investments in associates of Bt122 million; deferred tax assets of Bt52 million; and other non-current assets of Bt78 million.

The increase in total assets of Bt498 million from the previous year was due mainly to an increased in cash of Bt218 million, a decline of Bt460 million for the value of trade receivable and other receivable, an increase of Bt581 million of inventory as sales increased and including the effect of changing to consignment term that was started from the middle of the fiscal year, and an increase of Bt117 million for the value of property, plant and equipment acquired for the new factory (Phase 3) and for the Efficeincy improvement at a subsidiary.

Trade and other receivables - net

KCE customers include some of the world's leading electronics companies. Total trade and other receivables decreased from a net Bt4,540 million in 2015 to Bt4,080 million in 2016, driven by an increase in sales revenue and a better debt collection. Average days receivables was 121 in 2016. KCE's policy is that an allowance for doubtful accounts is assessed primarily on analysis of payment history and expectations of customer payment in the future. Bad debts are written off when incurred. There was no allowance for doubtful accounts established based on this policy as of Dec. 31, 2016.

Inventory - net

As of Dec. 31, 2016, the company had a net inventory of Bt2,265 million, up for Bt581 million in 2015, due to an increase in production to support customer orders.

Inventory as at 31 December 2016 included finished goods of Bt376 million (31 December 2015: Bt25 million) in the consolidated financial statement, which had been delivered to the customers' warehouses but the title of the inventory shall remain with the Group until the customers' requisition to their production process, or within the periods specified in the agreement.

KCE's policy is to establish an allowance for diminution in value of inventory in accordance with the ageing of individual material types and an allowance for diminution in the value of finished goods to net realizable value (NRV). As of Dec. 31, 2016, KCE established allowances for diminution in value of inventory amounting to Bt86 million, and recorded a diminution value amounting to Bt22million in cost of sales of 2016.

Inventory days declined to 31 days in 2015, from 33 days in the last year.

Liabilities

(Unit: Baht million)

	2016	2015	2014	2013	2012
Total Liabilities	7,300	8,729	8,771	7,173	7,178
Debt:					
Short-term borrowing	1,808	2,139	2,652	3,219	2,812
Long-term loan	2,698	4,123	3,177	1,622	2,690
Leasing	22	50	80	10	29
Total Debt	4,528	6,312	5,909	4,851	5,531
Total Debt-to-Equity	0.73	1.08	1.37	1.75	2.33 times

KCE's debt/equity ratio continued to improve as 1) the good operational results that were achieved, and resulted in an increase in cash flow. In addition, the Company repiad the long-term Loan in advance of approximately Bt1,400 million and KCE Technology's long-term loan has already paid out and 2) shareholder equity has been growing as a result of the profitable operation, although this was offset by a dividend payment of Bt1,171 million during 2016.

Liquidity

With operational profit in 2016, KCE achieved a positive cash flow from operations totaling Bt4,373 million (2015: Bt2,590 million). Net cash used for investment activities, mostly for the new plant construction and for the purchase of equipment accounted for Bt1,032 million. Cash used in financing activities was Bt3,122 million, being total loan repayment of Bt2,201 million (2015: Bt382 million), which included the repayment in advance of approximately Bt1,400 million) and dividend payment of Bt1,171 million (2015: Bt694 million); in summary, cash balance as of Dec.31, 2015 increased by Bt891 million.

As of Dec. 31, 2016, the current ratio had improved from 1.38 to 1.48, the result of higher current assets, while lower current liabilities – thanks to the increase in cash from operations. The Company was able to pay suppliers on the due dates and service its debt on the agreed terms. Total liquidity at year-end included cash and unutilized credit facilities.

Capital Structure

(Unit: Baht million)

	2016	2015	2014	2013	2012	
Debt	4,528	6,312	5,909	4,851	5.531	
Equity	9,990	8,073	6,361	4,110	3,064	
Non-controlling interests	37	_27_	26	_20_	13	
Total capital	<u>14,555</u>	<u>14,412</u>	<u>12,296</u>	<u>8,981</u>	<u>8,608</u>	
Gearing Ratio	0.45	0.78	0.93	1.18	1.80 t	times

(Interest-bearing debt only)

The capital structure has been reviewed and where possible debt has been restructured, with the gearing ratio gradually being reduced from a level of 2.09 in 2011 to 0.45 as of year-end 2016.

Capital Expenditure

Total capital expenditure (CAPEX) for 2016 amounted to Bt1,050 million, of which approximately Bt360 million was for KCE Electronics PCL's new plant project - Phase 3 (increased capacity of 700,000 sq.ft. a month); and Bt220 million was for the efficiency improvement project of KCE Technology Co., Ltd., Bt160 million was for the plant expansion project of Thai Laminate Manufacturer Co., Ltd. The Company also invested in an office building property in Japan for approximately Bt200 million, the building will be occupied by its sales representative office to support future business expansion. Other expenditures were for other subsidiaries, mostly to cover efficiency improvement projects and necessary equipment and facility improvements.

Exceptional Items

During 2016, there was no significant exceptional transactions occurred, except the following transactions:

1) KCE Technology Co., Ltd. (its subsidiary) booked an impairment allowance of Bt57 million on replaced machinery to support the modification of the production process under an Efficiency Improvement Project, at the Ayutthaya plant.

2) KCE Technology Co., Ltd. (its subsidiary) recorded an adjustment regarding one-off tax expense of approximately Bt22 million related to insurance income from the prior year. The additional tax filing was completed in the fourth quarter of 2016.

3) The Board of Directors' Meeting No. 5/2016, held on May 10, 2016, passed a resolution approving the Employee Joint Investment program of KCE Electronics Public Company Limited - No. 1 ("EJIP"). The EJIP serves as another mean of compensation to employees, executives of the Company and subsidiaries, to promote a sense of ownership and serve as a tool for incentive in working, and retaining personnel for a long-term employment with the Company. The said project was already got approved from the Office of the SEC. The project will cover the period from July 1, 2016 to June 30, 2021, or a total of 5 years. In 2016, the Company and its subsidiaries have contributed for the total amount of Bt.16 million.

Looking forward

KCE continues to focus on advanced technology development and quality performance in order to keep pace with increasing functionality requirements and to capture opportunities created by the growth of automotive PCB.

KCE moved forward with enhanced levels of efficiency that will continue to improve and support profit growth. The Company will build a strong foundation for the future by leveraging KCE's expertise in the automotive electronics sector, increasing R&D in high-tech PCBs, and enlarging its customer base by targeting high growth groups in Asian markets to accelerate business expansion.

A new plant facility located in the Latkrabang Industrial Estate that will eventually have a production capacity of 2 million sq.ft. a month, is expected to support the increased volumes required for new and existing customers. The construction of Phase 1 of that project started in 4Q13, and the plant was ready for operation at the start of 1Q15 with an initial production capacity

of 700,000 sq.ft. a month. Work on Phase 2 of the project with planned schedule to start in 3Q15, with the existing production facilities to be transferred to the new location when construction was complete. The additional capacity will thus match the original plant's 600,000 sq.ft. a month. Phase 3 of the expansion is planned to start up in 4Q16, with only additional investment in new machinery required. This phase will add capacity of 700,000 sq.ft. a month. The factory should thus reach the maximum manufacturing utilization rate of 2 million sq.ft. a month in 2018; and sales growth for the group is targeted to average 20% a year during 2015 to 2018.

The operation was successfully implemented as planned. Phase 1 of the new plant started operations in the beginning of 2015 and increasingly used higher production capacity. Phase 2 of the new plant implemented in the 3Q15 as planned, and completed the transfer of operations from the old plant in the middle of 4Q15. By running production at only one plant facility, resulted in higher economies of scale at the new plant, and help reducing cost of manufacturing significantly and increasing profit.

Phase 3 investment of the new plant has started partially from 3-4Q16, whereas purchase orders have been placed for selected items, either necessary machines or the machines that have a long delivery lead-time. Additional investment of Bt500 million will be made in the period of 3Q17. It is expected that the machine installation could be completed by 4Q2017 and Phase 3 of the new plant is planned to launch in early of 2018.