

MANAGEMENT DISCUSSION AND ANALYSIS

FOR THE CONSOLIDATED FINANCIAL STATEMENTS
YEAR 2017

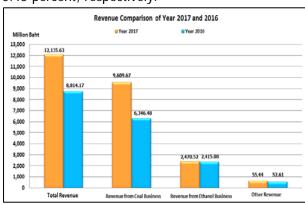
LANNA RESOURCES PUBLIC COMPANY LIMITED MANAGEMENT DISCUSSION AND ANALYSIS

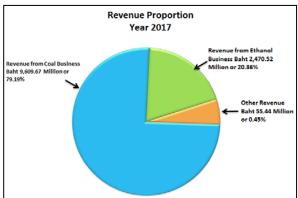
(For the Consolidated Financial Statements Year 2017)

OVERALL OPERATING RESULTS

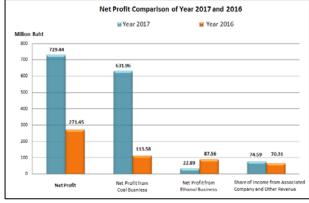
The overall operating results for year 2017 of the Company and subsidiary companies recorded an excellent growth in terms of revenue and net profit with an increase in net profit of nearly twofold as compared with the previous year, in line with continuous rise in coal prices, which is the Company's core business. Thus, earnings efficiency has improved significantly.

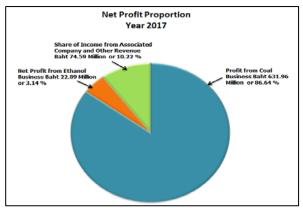
The Company and subsidiary companies had total revenue in year 2017 of Baht 12,135.63 million, increased from the previous year by Baht 3,321.46 million or 37.68 percent. The revenue proportion from coal business, ethanol business and other revenue accounted for 79.19, 20.36 and 0.45 percent, respectively.





The Company and subsidiary companies had total net profit in year 2017 of Baht 729.44 million or net earnings per share of Baht 1.39, increased from the previous year by Baht 457.99 million or 168.72 percent. The net profit proportion from coal business, ethanol business, and share of income from the associated company and other revenue accounted for 86.64, 3.14 and 10.22 percent, respectively, with the net profit margin of 10.04 percent, an increase from the previous year of 114.05 percent; the EBITDA margin of 20.78 percent, an increase from the previous year of 55.58 percent; and the return on equity of 17.25 percent, an increase from the previous year of 166.13 percent.





The overall financial status and liquidity of the Company and subsidiary companies as at the end of 2017 were considered excellent. The current ratio and quick ratio were as high as 1.85 and 1.35 times, respectively, but the total debt to total assets ratio was only 32.82 percent, with debt to equity ratio of only 48.85 percent, and cash cycle in year 2017 was only 27 days, a decrease of 7 days from the previous year.

COAL BUSINESS: Coal prices, which is Company's core business, continued to increase during the past year, with the revenue from the coal business in year 2017 totaled Baht 9,609.67 million, which increased from the previous year by Baht 3,263.19 million or 51.42 percent, due to the increase in coal sales volume and average coal selling price of 18.87 and 27.38 percent, respectively. The net profit derived from shareholding proportion of the Company in year 2017 were Baht 631.96 million, an increase from the previous year of Baht 518.38 million or 456.40 percent. Thus, earnings efficiency has improved significantly.

ETHANOL BUSINESS: The total revenue in year 2017 from ethanol business, which is the Company's secondary core business, was Baht 2,470.52 million, which increased from the previous year by Baht 55.44 million or 2.30 percent. Despite the decrease in ethanol sales volume of 7.39 percent from the previous year, but the average ethanol selling price increased from the previous year by 10.48 percent. The net profit derived from shareholding proportion of the Company in year 2017 was Baht 22.89 million, which decreased from the previous year by Baht 64.67 million or 73.86 percent due to the flood incident causing damage to the treated wastewater pond of the ethanol production plant of the subsidiary company. Consequently, the ethanol production was temporary halted to solve such problem which lasted more than two months during the 4th quarter year 2017, by which the compensation was paid to the affected villagers totaling Baht 73.32 million. The ethanol production plant was reopened and continued with ethanol production and distribution as normal in early December 2017. The net profit from ethanol business in year 2017 therefore decreased as mentioned above.

OPERATING RESULTS ANALYSIS

Revenue	Year 2017		Year 2016		Increase (Decrease)	
	Million Baht	%	Million Baht	%	Million Baht	%
Revenue from Coal Sales	9,609.67	79.19	6,346.48	72.00	3,263.19	51.42
Revenue from Ethanol Sales	2,470.52	20.36	2,415.08	27.40	55.44	2.30
Other Revenue	55.44	0.45	52.61	0.60	2.83	5.38
Total Revenue	12,135.63	100.00	8,814.17	100.00	3,321.46	37.68

REVENUE: The revenue of the Company and subsidiary companies in year 2017 totaled Baht 12,135.63 million, which increased from the previous year by Baht 3,321.46 million or 37.68 percent due to the following reasons:

- (1) Revenue from coal business totaled Baht 9,609.67 million, which increased from the previous year by Baht 3,263.19 million or 51.42 percent. This was due to the increase in coal sales volume and coal selling price as described above.
- (2) Revenue from ethanol business totaled Baht 2,470.52 million, which increased from the previous year by Baht 55.44 million or 2.30 percent. This was due the increase in ethanol selling price as described above; and
- (3) Other revenue totaled Baht 55.44 million, which increased from the previous year by Baht 2.83 million or 5.38 percent due to the increase in interest received.

Expenses	Year 2017		Year 2016		Increase (Decrease)	
p	Million Baht	% Sales	Million Baht	% Sales	Million Baht	% Sales
Coal Business						
Cost of Sales	5,628.56	58.57	4,448.53	70.09	1,180.03	26.53
Selling and Administrative Expenses	2,295.36	23.89	1,603.36	25.26	692.02	43.16
Financial Expense	31.04	0.32	12.30	0.19	18.74	152.36
Corporate Income Tax	557.34	5.80	113.88	1.79	443.46	389.41
Ethanol Business						
Cost of Sales	2,219.66	89.85	2,111.84	87.44	107.82	5.11
Selling and Administrative Expenses	171.68	6.95	77.67	3.22	94.01	121.04
Financial Expense	32.85	1.33	37.80	1.57	(4.95)	(13.10)
Corporate Income Tax	(0.50)	(0.02)	12.94	0.54	(13.44)	(103.86)

COAL BUSINESS EXPENSES: The coal business expenses of the Company and subsidiary companies in year 2017 totaled Baht 8,512.30 million, which increased from the previous year by Baht 2,334.23 million or 37.78 percent, due to the following reasons:

- (1) Cost of coal sales increased from the previous year by Baht 1,180.03 million or 26.53 percent, due to the increase in coal sales volume and cost of coal sales by 18.87 and 6.44 percent, respectively.
- (2) Selling and administrative expenses increased from the previous year by Baht 692.00 million or 43.16 percent due to the increase in coal sales volume and revenue from coal sales as described above.
- (3) Financial expense increased from the previous year by Baht 18.74 million or 152.36 percent due to the increase in interest expense according to the lease agreement on coal transport jetty investment of the subsidiary company; and
- (4) Corporate income tax increased from the previous year by Baht 443.46 million or 389.41 percent due to the increase in profit.

ETHANOL BUSINESS EXPENSES: Ethanol business expenses of the subsidiary company in year 2017 totaled Baht 2,423.69 million, which increased from the previous year by Baht 183.44 million or 8.19 percent, due to the following reasons:

- (1) Cost of ethanol sales increased from the previous year by 107.82 million or 5.11 percent, due to the increase in the molasses price, which is a major cost, of 18.59 percent.
- (2) Selling and administrative expenses increased from the previous year by Baht 94.01 million or 121.04 percent, due to the compensation of Baht 73.32 million paid to the affected villagers from the flood incident that caused damage to the treated wastewater pond of the ethanol production plant as described above.
- (3) Financial expense decreased from the previous year by Baht 4.95 million or 13.10 percent due to loan repayment according to terms and repayment schedule in the loan agreement; and

(4) There was no corporate income tax on the earnings from the Ethanol Production Line No. 2, having received the Board of Investment Promotion according to the Investment Promotion Act B.E. 2520. However, the Ethanol Production Line No. 1 incurred net operating loss in 2017, therefore, the incurred corporate income tax therefore decreased from the previous year by Baht 13.44 million or 103.86 percent.

Gross Profit	Coal Business		Ethanol Business		Total	
GIOSS FIOR	Million Baht	%	Million Baht	%	Million Baht	%
Year 2017						
Revenues from Sales	9,609.67	100.00	2,470.52	100.00	12,080.19	100.00
Less Cost of Sales	5,628.56	58.57	2,219.66	89.85	7,848.22	64.97
Gross Profit	3,981.11	41.43	250.86	10.15	4,231.97	35.03
Year 2016						
Revenues from Sales	6,346.48	100.00	2,415.08	100.00	8,761.56	100.00
Less Cost of Sales	4,448.53	70.09	2,111.84	87.44	6,560.37	74.88
Gross Profit	1,897.95	29.91	303.24	12.56	2,201.19	25.12

GROSS PROFIT: The gross profit of the Company and subsidiary companies in year 2017 totaled Baht 4,231.97 million, or 35.03 percent of the sales revenue, which increased from the previous year with the gross profit of Baht 2,201.19 million or 25.12 percent of the sales revenue, due to the following reasons:

- (1) Gross profit from coal business was 41.43 percent of the sales revenue, which increased from the previous year with gross profit of 29.91 percent of the sales revenue. This was due to the increase in average coal selling price of 27.38 percent, while the average cost of coal sales slightly decreased by 6.44 percent; and
- (2) Gross profit from ethanol business was 10.15 percent of the sales revenue, which decreased from the previous year with gross profit of 12.56 percent of the sales revenue. This was due to the increase in average ethanol selling price of 10.48 percent, while the average cost of ethanol sales increased by 13.49 percent.

	Year 2017		Year 2016		Increase (Decrease)	
Net Profit	Million Baht	%	Million Baht	%	Million Baht	%
Profit from Coal Business	631.96	86.64	113.58	41.84	518.38	456.40
Profit form Ethanol Business	22.89	3.14	87.56	32.26	(64.67)	(73.86)
Other Revenue and Share of Income from Associated Company	74.59	10.22	70.31	25.90	4.28	6.09
Net Profit	729.44	100.00	271.45	100.00	457.99	168.72
Net Earnings per share (Baht per share)	1.3	9	0.5	52	0.87	168.72

NET PROFIT: The net profit of the Company and subsidiary companies in year 2017 totaled Baht 729.44 million, or net earnings per share of Baht 1.39, which increased from the previous year by Baht 457.99 million or net earnings per share of Baht 0.87 or 168.72 percent, due to the following reasons:

- (1) Net profit from coal business derived from shareholding proportion of the Company was Baht 631.96 million or 86.64 percent of the total net profit, which increased from the previous year by Baht 518.38 million or 456.40 percent. This was due to the increase in coal sales volume and average coal selling price of 18.87 and 27.38 percent, respectively.
- (2) Net profit from ethanol business derived from shareholding proportion of the Company was Baht 22.89 million or 3.14 percent of the total net profit, which decreased from the previous year by Baht 64.67 million or 73.86 percent due to the flood incident as described above.
- (3) Share of income from associated company and other revenue were Baht 74.59 million or 10.22 percent of the total net profit, which increased from the previous year by Baht 4.28 million or 6.09 percent, due to an increase in share of income from associated company and interest received as described above.

EARNINGS EFFICIENCY

- (1) EBITDA (Earnings before financial expenses, corporate income tax, depreciation and amortization) of the Company and subsidiary companies in year 2017 was Baht 2,521.42 million, which increased from the previous year by Baht 1,344.32 million or 114.21 percent and EBITDA margin was at 20.78 percent, which increased from the previous year by 55.58 percent.
- (2) Net profit margin of the Company and subsidiary companies in year 2017 was at 10.04 percent, which increased from the previous year by 114.05 percent.
- (3) Return on equity of the Company and subsidiary companies in year 2017 was at 17.25 percent, which increased from the previous year by 166.13 percent.
- (4) Return on total assets of the Company and subsidiary companies in year 2017 was at 14.09 percent, which increased from the previous year by 194.79 percent. The return on fixed assets in year 2017 was at 52.41 percent, which increased from the previous year by 83.46 percent.

STATEMENT OF FINANCIAL POSITION

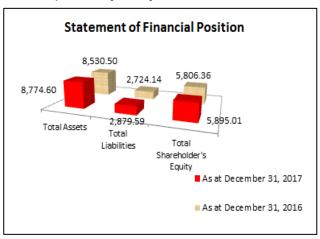
As at December 31, 2017	As at December 31, 2016	Million Baht	
		Willion Dant	%
8,774.60	8,530.50	244.10	2.86
2,879.59	2,724.14	155.45	5.71
5,895.01	5,806.36	88.65	1.53
8.26	7.84	0.42	5.36
	5,895.01	5,895.01 5,806.36 8.26 7.84	5,895.01 5,806.36 88.65 8.26 7.84 0.42

ASSETS: The total assets of the Company and subsidiary companies as at end of year 2017 increased from the previous year by Baht 244.10 million or 2.86 percent, due to (1) Current assets increased by Baht 438.21 million or 11.05 percent, consisting of: (A) cash and cash equivalent increased by Baht 631.38 million or 47.44 percent; (B) trade accounts receivable and other accounts receivable increased by Baht 651.72 million or 105.70 percent; (C) inventories decreased by Baht 67.63 million or 14.69 percent; and (D) other current assets most of which were prepaid corporate income tax, prepaid expenses, etc., decreased by Baht 777.26 million or 49.89 percent; and (2) Noncurrent assets, most of which were properties, buildings and equipment decreased by Baht 194.11 million or 4.25 percent.

LIABILITIES: The total liabilities of the Company and subsidiary companies as at end of year 2017 increased from the previous year by Baht 155.45 million or 5.71 percent, due to (1) Trade accounts payable and other accounts payable increased by Baht 75.63 million or 15.71 percent (2) Loan decreased by Baht 312.48 million or 23.51 percent (3) Accrued expenses, most of which were overburden removal expenses and freight cost, etc., increased by Baht 499.46 million or 166.73 percent; and (4) Other liabilities, most of which were the lease agreement on coal transport jetty investment of the subsidiary company and provision for mine rehabilitation and allowance for long-term benefits of employees, etc., decreased by Baht 107.16 million or 17.46 percent.

TOTAL SHAREHOLDERS' EQUITY: The total shareholders' equity of the Company and subsidiary companies as at end of year 2017 increased from the previous year by Baht 88.65 million or 1.53

percent, resulting in an increase of the share's book value from Baht 7.84 per share to Baht 8.26 per share, an increase of Baht 0.42 per share or 5.36 percent. This was due to: (1) an increase in retained earnings of Baht 363.37 million or 13.36 percent due to an increase in net profit of Baht 729.44 million but there was dividend payment of Baht 362.25 million and a decrease in miscellaneous items of Baht 3.82 million (2) a net decrease in translation adjustment in financial of Baht 143.01 million or 121.73 percent; and (3) a decrease in minority shareholders' equity of Baht 131.71 million or 7.80 percent.



CASH FLOWS

Description	Unit: Million Baht			
Description	Year 2017	Year 2016		
Cash Flows from (used in) Operating Activities	2,615.61	1,019.28		
Cash Flows from (used in) Investing Activities	(817.54)	(236.36)		
Cash Flows from (used in) Financing Activities	(1,381.37)	(757.79)		
Increase (Decrease) in Translation Adjustments in Financial Statements	13.20	12.89		
Net Increase (Decrease) in Cash	429.90	38.02		
Cash at the beginning of the period	698.17	660.15		
Cash at the end of the period	1,128.07	698.17		

(1) The net cash from operating activities of the Company and subsidiary companies in year 2017 totaled Baht 2,615.61 million, consisting of: (A) income before corporate income tax and interest expense of Baht 1,775.63 million; (B) transactions that did not affect the cash such as depreciation and amortization of assets, most of which were mostly transactions concerning coal mining operations of the subsidiary companies in Indonesia of Baht 751.36 million; (C) a decrease in operating assets of Baht 26.09 million; (D) an increase in operating liabilities of Baht 189.74 million; and (E) an increase in interest received of Baht 21.34 million and interest expense and taxes increased by Baht 148.55 million.

- (2) The net cash used in investing activities of the Company and subsidiary companies in year 2017 totaled Baht 817.54 million, consisting of: (A) properties, buildings and equipment increased by Baht 266.54 million, most of which were the coal transport jetty construction and wastewater treatment system construction of the subsidiary company; (B) an increase in expenses of coal mine projects of subsidiary companies in Indonesia of Baht 355.40 million; and (C) short-term capital investment and other items increased by Baht 195.60 million.
- (3) The net cash used in financing activities of the Company and subsidiary companies in year 2017 totaled Baht 1,381.37 million, consisting of: (A) a decrease in loan of Baht 315.82 million, (B) dividend payment of Baht 893.61 million, (C) an increase in interest expense under investment lease agreement of Baht 85.36 million and (D) a decrease in minority shareholders' equity of Baht 86.58 million.

ASSET MANAGEMENT CAPABILITY

- (1) The trade accounts receivable and other accounts receivable of the Company and subsidiary companies as at end of year 2017 were 14.45 percent of total assets. The provisions of doubtful debts are considered based on review of receivable period and assessment of past debt collection experience. Therefore, there was no provision of doubtful debt in year 2017.
- (2) Inventory of the Company and subsidiary companies as at end of year 2017 was 4.48 percent of total assets without deterioration of the products. Therefore, there was no allowance for impairment loss of inventory in year 2017.
- (3) The Company's goodwill incurred from investment in the subsidiary company in Indonesia as at end of year 2017 was accounted for 2.12 percent of total assets, of which the Company considered financial projection and impact in various aspects and found that it was not yet necessary for establishment of allowance for goodwill impairment from investment in year 2017.

LIQUIDITY AND SUFFICIENCY OF CAPITAL

- (1) The total debt to equity ratio of the Company and subsidiary companies as at end of year 2017 was as low as 0.49:1 with appropriate capital structure, and the Company has cash generation and credit facilities for future investment projects as the interest coverage ratio in year 2017 was as high as 50.54 times. Therefore, the Company should not have any problem.
- (2) The current ratio and quick ratio of the Company and subsidiary companies as at end of year 2017 were as high as 1.85 times and 1.35 times, respectively, regarding as high liquidity.
- (3) The cash cycle of the Company and subsidiary companies in year 2017 was only 27 days, which was considered within good standard and decreased from the previous year by 7 days. The average debt collection period was at 27 days, which decreased from the previous year by 2 days. The average inventory turnover was at 20 days, which decreased from the previous year by 6 days, but the average debt repayment period was at 20 days, decreased from the previous year by 1 day.

DEBT OBLIGATION

The subsidiary company in a business of ethanol-for-fuel production and distribution has obligation according to the terms and conditions of the loan agreement with a local commercial bank as follows:

(1) The subsidiary company must maintain its debt to equity ratio (D/E ratio) not exceeding 2 times and debt service coverage ratio (DSCR) of no less than 1.25 times until the expiration of the loan agreement, but the subsidiary company was affected by the flood incident in late 2017 as described above, as a result, it is unable to maintain the DSCR as required by the contractual obligation of the loan, by which the lending bank has issued a letter of notification to waive the debt to equity ratio for year ended December 31, 2017.

- (2) The lending bank has stipulated that the Company must maintain its shareholding proportion in the subsidiary company of no less than 50 percent of the total number of shares during the whole duration of the loan agreement. Accordingly, the Company has no plan to sell or decrease its shareholding proportion in the subsidiary company to below 50 percent of the total number of shares.
- (3) The lending bank has stipulated that the subsidiary company cannot pay dividend to its shareholders, including the Company, if the subsidiary company cannot comply with the conditions as stipulated within the loan agreement, such as the maintenance of D/E ratio, DSCR, and shareholding proportion of the Company in the subsidiary company, etc. Accordingly, the subsidiary company has never breached the conditions of loan agreements and has been provided with good financial support from lending banks.

FUTURE TREND

Coal Business: As global coal prices have continued to rise, it is expected that the operating results of the coal business, which is a core business, will be able to make more profit growth in year 2018 with positive global coal price trend. In early 2018, PT. Lanna Harita Indonesia ("LHI") and PT. Lanna Singlurus Pratama ("SGP"), subsidiary companies in Indonesia, have amended their coal mining concession on the divestment of foreign or non-Indonesian shareholding to not more than 49 percent of paid-up capital within year 2019, by which the Company has disclosed this information to the Stock Exchange of Thailand to inform the shareholders and investors. Nevertheless, the Company still has management control in both subsidiary companies, which allows for the consolidation of both subsidiary companies' financial statements into the Company's consolidated financial statements as before.

Ethanol Business: Impact from the flood incident in late 2017 as described above has caused the operating results of ethanol business in 2017 to be lower than expectation. It is anticipated that the ethanol business will be profitable in year 2018 as before as the Energy Business Department is considering the direction on gasohol 91 phase-out which will drive the use of gasohol E20 and should result in higher demand for ethanol.

Regardless, the overall operating results in year 2018 are expected to be more profitable with coal price staying at high level. Nonetheless, the Company shall endeavor to manage and resolve all the problems with prudence and caution to ensure good operating results in the following year and proceed with regular dividend payments to shareholders according to the established policy.