

THAI AGRO ENERGY PUBLIC COMPANY LIMITED

MANAGEMENT DISCUSSION AND ANALYSIS

FOR FINANCIAL STATEMENTS OF

THE 2nd QUARTER 2019



MANAGEMENT DISCUSSION AND ANALYSIS

(For the Financial Statements of the 2nd Quarter 2019)

OVERALL OPERATING RESULTS

The Company's overall operating results during the 2nd quarter 2019 and the first 6-month period of 2019 can be considered as excellent and very satisfactory. The Company had total revenue in the 2nd quarter 2019 Baht 622.47 million, which decreased from the same period last year by 13.05 percent. This was due to the sales volume of ethanol and average ethanol selling price in the 2nd quarter 2019 decreased from the same period last year by 6.58 and 7.16 percent respectively, while the total revenue of the first 6-month period of 2019 were Baht 1,376.57 million, which increased from the same period last year by 4.07 percent due to the sales volume of ethanol increased from the same period last year by 14.03 percent and the ethanol selling price decreased from the same period last year by 8.87 percent. The net profit of the 2nd quarter of 2019 and the first 6-month period of 2019 were Baht 141.07 million and Baht 322.53 million respectively, which increased from the same period last year by 139.18 percent and 161.24 percent respectively, generating a net earnings at Baht 0.14 per share and Baht 0.32 per share, which increased from the same period last year by 133.33 percent and 166.67 percent respectively due to the price of molasses, the raw material, which is a major cost decreased from the same period last year by 26.48 percent in average.

OPERATING RESULTS ANALYSIS

REVENUE:

- (1) The Company's total revenue in the 2nd quarter 2019 was Baht 622.47 million, which decreased from the same period last year by Baht 93.44 million or 13.05 percent, due to the following reasons.
- (1.1) The revenue from ethanol sales was Baht 620.52 million or 99.69 percent of total revenue, decreased by Baht 94.89 million or 13.26 percent from the same period last year due to the decrease in ethanol sales volume by 6.58 percent from the same period last year and the selling price decreased from the same period last year by 7.16 percent in average.
- (1.2) The other revenue was Baht 1.95 million or 0.31 percent of total revenue, increased by Baht 1.45 million or 290 percent from the same period last year. This was due to the increase of income from the sales of deferred assets.
- (2) The Company's revenue in the first 6-month period of 2019 amount to Baht 1,376.57 million, which increased from the same period of last year by Baht 53.88 million or 4.07 percent, due to the following reasons.



- (2.1) The revenue from ethanol sales totaled Baht 1,373.93 million or 99.81 percent of total revenue, which increased from the same period of last year Baht 52.24 million or 3.95 percent due to the increase of ethanol sales volume from the same period last year by 14.03 percent but the ethanol selling price decrease from the same period last year by 8.87 percent in average.
- (2.2) The other revenue was Baht 2.64 million or 0.19 percent of total revenue, which increased from the same period of last year by Baht 1.64 million or 164 percent. This was due to the increase in revenue from the sales of deferred assets.

Revenue	Year 2019		Year 2018		Increase (Decrease)	
	Baht Million	%	Baht Million	%	Baht Million	%
2 nd quarter (April – June)						
Sales Revenue	620.52	99.69	715.41	99.93	(94.89)	(13.26)
Other Revenue	1.95	0.31	0.50	0.07	1.45	290.00
Total Revenue	622.47	100.00	715.91	100.00	(93.44)	(13.05)
6-Month Period (January – June)						
Sales Revenue	1,373.93	99.81	1,321.69	99.92	52.24	3.95
Other Revenue	2.64	0.19	1.00	0.08	1.64	164.00
Total Revenue	1,376.57	100.00	1,322.69	100.00	53.88	4.07

EXPENSES:

- (1) The Company's expenses in the 2nd quarter 2019 totaled Baht 481.40 million, which decreased from the same period last year by Baht 175.53 million or 26.72 percent, due to the following reasons;
- (1.1) Cost of ethanol sales decreased by Baht 171.24 million or 27.53 percent from the same period last year. This was due to decreases in ethanol sales volume and average price of molasses which is raw material of 6.58 percent and 25.32 percent respectively, from the same period last year as described above.
- (1.2) Selling and administrative expenses increased by Baht 5.86 million or 30.07 percent from the same period last year. This was due to the increase of transportation cost and employee benefits expense.
- (1.3) Finance expenses decreased from the same period last year by Baht 1.77 million or 16.48 percent. This was due to the lower short term loan than the same period last year.
- (1.4) Corporate income tax decreased by Baht 8.38 million or 174.95 percent from the same period last year due to the additional tax exemption for ethanol production line 1 from investment promotion as its efficiency was improved to deduct effect on environment.



- (2) The Company's expenses in the first 6-month period of 2019 totaled Baht 1,054.04 million, a decrease from the same period last year by Baht 145.19 million or 12.11 percent, due to the following reasons.
- (2.1) Cost of ethanol sales decreased from the same period last year by Baht 151.83 million or 13.42 percent. This was due to the price of molasses, the raw material, which is a major cost decreased from the same period last year by 26.48 percent in average as mentioned above.
- (2.2) Selling and administrative expenses decreased from the same period last year by Baht 1.22 million or 2.82 percent. This was due to the compensation payment to the affected villagers from the flood incident that caused damage to the treated wastewater pond in 2017 has been made during the first 6-month period of 2018.
- (2.3) Finance cost decreased from the same period of last year by Baht 0.70 million or 3.64 percent. This was due to the lower loan.
- (2.4) Corporate Income tax expense increased from the same period last year by Baht 8.56 million or 147.84 percent from due to the higher profit.

	Year 2019		Year 2018		Increase (Decrease)	
Expenses	Baht	% Sale	Baht	% Sale	Baht	%
	Million		Million		Million	
2 nd quarter (April – June)						
Cost of sales	450.67	72.63	621.91	86.93	(171.24)	(27.53)
Selling and administrative expense	25.35	4.09	19.49	2.72	5.86	30.07
Financial cost	8.97	1.45	10.74	1.50	(1.77)	(16.48)
Corporate Income tax	(3.59)	(0.58)	4.79	0.67	(8.38)	(174.95)
Total Expenses	481.40	77.59	656.93	91.82	(175.53)	(26.72)
6-Month Period (January – June)						
Cost of sales	979.20	71.27	1,131.03	85.57	(151.83)	(13.42)
Selling and administrative expense	41.97	3.05	43.19	3.27	(1.22)	(2.82)
Financial cost	18.52	1.35	19.22	1.45	(0.70)	(3.64)
Corporate Income tax	14.35	1.04	5.79	0.44	8.56	147.54
Total Expenses	1,054.04	76.71	1,199.23	90.73	(145.19)	(12.11)

GROSS PROFIT:

(1) The Company's gross profit in the 2nd quarter of 2019 was Baht 169.85 million, or 27.37 percent of the revenue from sales, increased from the same period of last year which the gross profit was 93.50 million or 13.07 percent of the revenue from sales. This was due to the average price of molasses, the raw material, which is a major cost decreased from the same period last year by 25.32 percent.



(2) The Company's gross profit in the first 6-month period of 2019 was Baht 394.73 million, or 28.73 percent of sales revenue, which increased from the same period of last year which the gross profit was 190.66 million or 14.43 percent of the revenue from sales. This was due to the increase of ethanol sales volume from the same period last year by 14.03 percent and the average price of molasses, the raw material, which is a major cost decreased from the same period last year by 26.48 percent.

Grass profit	Year 20	19	Year 2018		
Gross profit	Baht Million	%	Baht Million	%	
2 nd quarter (April – June)					
Revenues from sales	620.52	100.00	715.41	100.00	
Less cost of sales	450.67	72.63	621.91	86.93	
Gross Profit	169.85	27.37	93.50	13.07	
6-Month Period (January – June)					
Revenues from sales	1,373.93	100.00	1,321.69	100.00	
Less cost of sales	979.20	71.27	1,131.03	85.57	
Gross Profit	394.73	28.73	190.66	14.43	

NET PROFIT:

- (1) The Company's net profit in the 2 nd quarter of 2019 was Baht 141.07 million. When compared to the same period last year, the net profit increased by Baht 82.09 million or 139.18 percent, generating a net earnings at Baht 0.14 per share which increased from the same period last year by Baht 0.08 per share or 133.33 percent due to the reasons as described above.
- (2) The Company's net profit in the first 6-month period of 2019 was Baht 322.53 million. When compared to the same period last year, the net profit increased by Baht 199.07 million or 1 61.24 percent, generating a net earnings at Baht 0.32 per share which increased from the same period last year by Baht 0.20 per share or 166.67 percent due to the reasons as described above.

Net Profit	Unit	Year 2019	Year 2018	Increase/ (Decrease)	%
2 nd quarter (April – June)					
NET PROFIT	Million Baht	141.07	58.98	82.09	139.18
NET PROFIT PER SHARE (Baht)	Baht per Share	0.14	0.06	0.08	133.33
6-Month Period (January – June)					
NET PROFIT	Million Baht	123.46	123.46	199.07	161.24
NET PROFIT PER SHARE (Baht)	Baht per Share	0.12	0.12	0.20	166.67
Remark Registered par value of Baht 1 per share					



EARNINGS EFFICIENCY

- (1) EBITDA (Earnings before financial expenses, corporate income tax, depreciation and amortization) of the Company in the 2nd quarter 2019 was Baht 187.79 million, which increased from the same period last year by Baht 73.62 million or 64.48 percent and EBITDA margin was at 30.17 percent, which increased from the same period last year by 14.22 percent. While EBITDA of the Company in the first 6-month period of 2019 was Baht 437.06 million which increased from the same period last year by Baht 210.32 million or 92.76 percent and EBITDA margin was 31.75 percent, which increased from the same period last year by 14.61 percent.
- (2) Net profit margin of the Company in the 2nd quarter 2019 was at 22.66 percent, which increased from the same period last year by 14.42 percent. Net profit margin of the Company in the first 6-month of 2019 was at 23.43 percent, which increased from the same period last year by14.10 percent.
- (3) Return on equity of the Company in the first 6-month period of 2019 was at 26.55 percent, which increased from the end of year 2018 by 9.24 percent.
- (4) Return on total assets of the Company in the first 6-month period of 2019 was at 13.48 percent, which increased from the end of 2018 by 4.57 percent. The return on fixed assets in the first 6-month of 2019 was at 23.69 percent, which increased from the end of year 2018 by 6.09 percent.

STATEMENT OF FINANCIAL POSITION

FINANCIAL POSITION	Unit	As at June	As at December	Increase (Decrease)	%
		30, 2019	31, 2018		
Total Assets	Million Baht	3,548.43	3,772.27	(223.84)	(5.93)
Total Liabilities	Million Baht	1,603.70	2,000.07	(396.37)	(19.82)
Total Shareholder's Equity	Million Baht	1,944.73	1,772.20	172.53	9.74
Book Value	Baht per Share	1.94	1.77	0.17	9.60
Remark: Registered per value of Baht 1 per share					

ASSETS: The Company's total assets as at June 30, 2019 decreased from the end of year 2018 by Baht 223.84 million or 5.93 percent. The total assets consisting of:

(1) Current Assets decreased from the end of 2018 by Baht 250.99 million or 24.86 percent, due to (A) Inventories, most of which were molasses, increased by Baht 152.45 million or 107.65 percent; (B) Cash and cash equivalent decreased by Baht 0.18 million or 0.56 percent; (C) Trade accounts receivable and other receivables decreased by Baht 62.54 million or 22.67 percent;



- (D) Advances payment for purchase goods, most of which were molasses, decreased by Baht 339.13 million or 62.21 percent, and (F) Other current assets decreased by Baht 1.59 million or 11.51 percent.
- (2) Non-Current Assets increased from the end of year 2018 by Baht 27.15 million or 0.98 percent, consisting of: (A) land, plant and equipment, most of which were machines in the Wastewater Evaporation Plant, increased by Baht 27.59 million or 1 percent; (B) Other non-current assets decreased by Baht 0.44 million or 6.81 percent.

LIABILITIES: The Company's Total Liabilities as at June 30, 2019 decreased from the end of year 2018 by Baht 396.37 million or 19.82 percent, due to (A) Trade accounts payable and other accounts payable, most of which were molasses purchase, decreased by Baht 24 million or 16.49 percent. (B) Short term and long term loans which for raw material supply and the construction of the Wastewater Evaporation Plant, decreased by Baht 360.82 million or 20.02 percent, and (C) Other liabilities which most were remaining corporate income tax decreased by Baht 11.55 million or 22.28 percent.

TOTAL SHAREHOLDERS' EQUITY: The total shareholders' equity of the Company as at June 30, 2019 increased from the end of year 2018 by Baht 172.53 million or 9.74 percent, resulting in an increase of the share's book value from Baht 1.77 per share to Baht 1.94 per share due to an increase of net profit.

CASH FLOWS

Cash Flows	First six months peri	First six months period (January – June)			
(Unit: Million Baht)	Year 2019	Year 2018			
Cash Flows from (used in)Operating Activities	663.47	(329.02)			
Cash Flows from (used in)Investing Activities	(151.60)	(267.22)			
Cash Flows from (used in)Financing Activities	(512.05)	592.82			
Net Increase (Decrease) in Cash	(0.18)	(3.42)			
Cash at the Beginning of the Period	32.19	35.31			
Cash at the End of the Period	32.01	31.89			

(1) The Company's net cash used in operating activities in the first 6-month period of 2019 was Baht 663.47 million, consisting of: (A) Profit before corporate income tax of Baht 336.88 million; (B) Non-cash items such as depreciation; Baht 99.68 million.(C) An decrease in operating assets of Baht 250.81 million due to an decrease in trade and other receivables and inventories and advance payments for purchase of goods and current assets; (D) An increase in operating liabilities of Baht 16.94 million due to an increase in trade accounts payable, other accounts payable, other current



liabilities and provision for long-term employee benefits; (E) An interest received of Baht 0.07 million; (F) An interest expense of Baht 18.76 million, and (G) Corporate income tax expense of Baht 22.15 million.

- (2) The Company's net cash used in investment activities in the first 6-month period of 2019 was Baht 151.60 million, consisting of : (A) The cost of construction of the Wastewater Evaporation Plant at Baht 99.25 million; (B) Deferred assets selling by Baht 1.78 million, and (C) Other expenses by Baht 54.13 million.
- (3) The Company's net cash used in financing activities in the first 6 month period of 2019 was Baht 512.05 million consisting of : (A) Repayment of short-term loan of Baht 378 million, (B) An increase in long-term loan by Baht 17.10 million, (C) Dividend payment of Baht 149.97 million, and (D) Repayment under financial lease of Baht 1.18 million.

LIQUIDITY AND SUFFICIENCY OF CAPITAL

- (1) The total debt to equity ratio of the Company as at June 30, 2019 was as low as 0.82:1 with appropriate capital structure. Therefore, the Company should not have any problem.
- (2) The current ratio and quick ratio of the Company as at June 30, 2019 were 0.69 times and 0.22 times, respectively, which is low but the Company have remaining inventories that can be easily exchanged to cash and the trade accounts receivable is the major fuel company that have stable financial situation. In addition, the Company has cash generation and adequate credit line for working in the future project with good support from financial institution.
- (3) The cash cycle of the Company in the first 6-month of 2019 was only 20.67 days, which increased from the end of year 2018 by 1.40 days. The average debt collection period was at 29.05 days, which decreased from the end of year 2018 by 0.70 days. The average inventory turnover was at 4.01 days, which increased from the end of year 2018 by 0.81 days, and the average debt repayment period was at 12.39 days, decreased from the end of year 2018 by 1.29 days.

DEBT OBLIGATION

The Company has debt obligation in accordance with the loan agreement with a local commercial bank as follows.

(1) The Company must maintain its debt to equity ratio (D/E ratio) not to exceed 2.50 times and debt service coverage ratio (DSCR) of no less than 1.10 time throughout the duration of loan agreement. So far, the Company has been able to maintain the D/E and DSCR ratio as required by the contractual obligation of the loan without any default.



- (2) The lending bank has determined that Lanna Resources Public Co., Ltd. (Lanna) must maintain its shareholding proportion in TAE of no less than 50 percent of the total number of shares during the whole duration of the loan agreement. So far, Lanna has no policy to decrease its shareholding proportion in TAE to below 50 percent of the total number of shares.
- (3) The lending bank has stipulated that the Company cannot pay dividend to its shareholders, including Lanna, if the Company cannot comply with the conditions stipulated in the loan agreement. such as maintaining of D/E and DSCR ratio, and maintaining shareholding proportion of Lanna in the Company, etc. So far, the Company has not breached the conditions of loan agreements and has been provided with good financial support from the lending banks.

UPCOMING INVESTMENT PROJECT

At present, the construction of the EVAPORATOR SYSTEM FOR BIO METHANATED SPENT WASH 3,000 M³/DAY was completed and the plant is on commissioning process. The project is an efficient long-term solution for treating wastewater, with all inherent positive environmental impact which complies with the Company's policy. Combined, the Evaporator condensate is a source of reuse water. Condensate recovery can reduce more than 90 percent of process water used in Ethanol production and excess electricity generated from the evaporation plant will be used in Ethanol production to save energy cost. Additionally, the Company will gain extra income from selling Potassium Humate, a by-product from evaporation process around 50,000 metric tons per year, which will generate more revenue and profit for the Company.

IMPACT TO FUTURE OPERATIONS

The price of molasses, which is used as raw material of ethanol production, is projected to low in 2019 as per the trend of world sugar prices. Consequently, the operating results of the Company in 2019 will be recorded a good level and very satisfactory. The Company will keep focus on maintain product quality and efficiently manage on production cost of ethanol production to have an excellent growth in operating results in the following year.

9