



Global Green Chemicals Public Company Limited

Management Discussion and Analysis  
For the operating results of 2Q/2019



## Executive Summary

In 2Q/2019, overall palm oil production and crude palm oil (CPO) inventory have remained high in both domestic and international market, consequence to lower crude palm oil (CPO) and crude palm kernel oil (CPKO) prices than that of 2Q/2018. Under these circumstances, in this quarter the government has maintained the biodiesel mandated at B7. Also, the government has promoted B20 and B10 as fuel options by subsidizing B20 and B10 to be lower than B7 at 5 Baht/litre and 1 Baht/litre respectively. Additionally, leading vehicle manufacture brands have accepted B20 and B10 to be used in their car models and have promoted the use of B20 to customers. Furthermore, the government has delegated the Electricity Generating Authority of Thailand (EGAT) to purchase crude palm oil continuously in the amount of 360,000 tons to be used as electricity which currently EGAT has bought 220,000 tons. The government has announced various measurements ,which attributed to increasing of methyl ester and crude palm oil demand in Thailand.

For natural fatty alcohols market, in 2Q/2019, it was better than 2Q/2018 because its price was more attractive than synthetic fatty alcohols price due to the decreasing of crude palm kernel oil price. Meanwhile, supply from natural fatty alcohols and synthetic fatty alcohols were tight which were impacted by the announcement of permanent shutdown of a synthetic fatty alcohols plant in Europe and temporary shutdown in some Chinese fatty alcohols plants due to more strictly safety control and more stringent environmental regulations by its government.

In 2Q/2019, the company had a plan to turnaround both of methyl ester plant 1 and fatty alcohols plant which are located at Map Ta Phut Industrial Estate, Rayong province during 11<sup>st</sup>-30<sup>th</sup> June 2019, of which, the methyl ester plant 1 had major turnaround for 11 days and the fatty alcohols plant had maintenance and catalyst changing for 20 days. However, as the company had announced the commercial operation of methyl ester plant 2 on April 5, 2019 with nameplate capacity 200,000 tons per year and also domestic crude palm oil price was lower than international crude palm oil price, resulted

to opportunity to export methyl ester amounted to 6,800 tons in this quarter, therefore, the company recorded methyl ester sales volume at 111,590 tons, an increase of 21,490 tons or 24% compared to the same quarter of the previous year. Meanwhile fatty alcohols sales volume was sold at 24,245 tons, decreased by 5,963 tons or 20% from 2Q/2018.

In 2Q/2019, total revenue was reported at THB 3,290 million, decreased from 2Q/2018 by THB 946 million or 22% and EBITDA was recorded at THB 88 million, a decrease of THB 49 million or 36% from the same quarter of previous year. This was primarily impact from declining of glycerine price driven by rising of global glycerine supply since biodiesel blending rate has been increased by the majority biodiesel producers in global, resulted to increasing of glycerine volume (by-product of methyl ester), and together with B100 profitability pressured by high competition and low crude palm oil price. As a result, the company posted net loss of THB 36 million, declining by 154% from 2Q/2018. However, the company had an extraordinary item from returning inventory from supplier of THB 14 million. Thus, the company posted net loss including extraordinary item THB 22 million. While in 2Q/2018, the company had net loss including extraordinary item from inventory derogation incident THB 1,853 million, therefore, the net loss was decreased by 99%.

As of 30 June 2019, the company has total assets in the amount of THB 12,667 million which comprised of cash and short-term investment amounted to THB 4,035 million, with total liabilities of THB 2,959 million and total equities of THB 9,708 million. In this regard, the company's financial position remains strong with low debt-to-equity ratio and high current ratio.

## Operating Performance

Exhibit 1 : Consolidated Company's Performance comparison of 2Q/2019 vs. 2Q/2018 vs. 1Q/2019 vs. 1H2019 vs. 1H2018

UNIT: M THB	2Q2019	2Q2018	% YoY	1Q2019	% QoQ	1H2019	1H2018	% YoY
Sales Revenue	3,290	4,236	-22%	2,816	17%	6,106	8,867	-31%
EBITDA	88	137	-36%	141	-38%	229	348	-34%
EBITDA Margin (%)	2.7%	3.2%	-0.5%	5.1%	-2.4%	3.8%	3.9%	-0.1%
Stock Gain/(Loss) & NRV	-58	-149	-61%	-74	-22%	-132	-382	-65%
Adjusted EBITDA <sup>(1)</sup>	146	286	-49%	215	-32%	361	730	-51%
Adjusted EBITDA Margin (%)	4.4%	6.8%	-2.4%	7.6%	-3.2%	5.9%	8.2%	-2.3%
<b>Net Profit</b>	<b>-36</b>	<b>67</b>	<b>-154%</b>	<b>20</b>	<b>-280%</b>	<b>-16</b>	<b>131</b>	<b>-112%</b>
Item from raw materials derogation	14	-2,004	-101%	2	600%	16	-2,004	-101%
Tax income from deferred tax assets	-	84	-100%	-	n.a.	-	84	-100%
<b>Extra item net of tax</b>	<b>14<sup>(3)</sup></b>	<b>-1,920<sup>(2)</sup></b>	<b>-101%</b>	<b>2<sup>(3)</sup></b>	<b>600%</b>	<b>16<sup>(3)</sup></b>	<b>-1,920<sup>(2)</sup></b>	<b>-101%</b>
<b>Net Profit after extra items</b>	<b>-22</b>	<b>-1,853</b>	<b>-99%</b>	<b>22</b>	<b>-200%</b>	<b>0</b>	<b>-1,789</b>	<b>-100%</b>
EPS (Baht/share)	-0.02	-1.81	-99%	0.02	-200%	0.00	-1.75	-100%

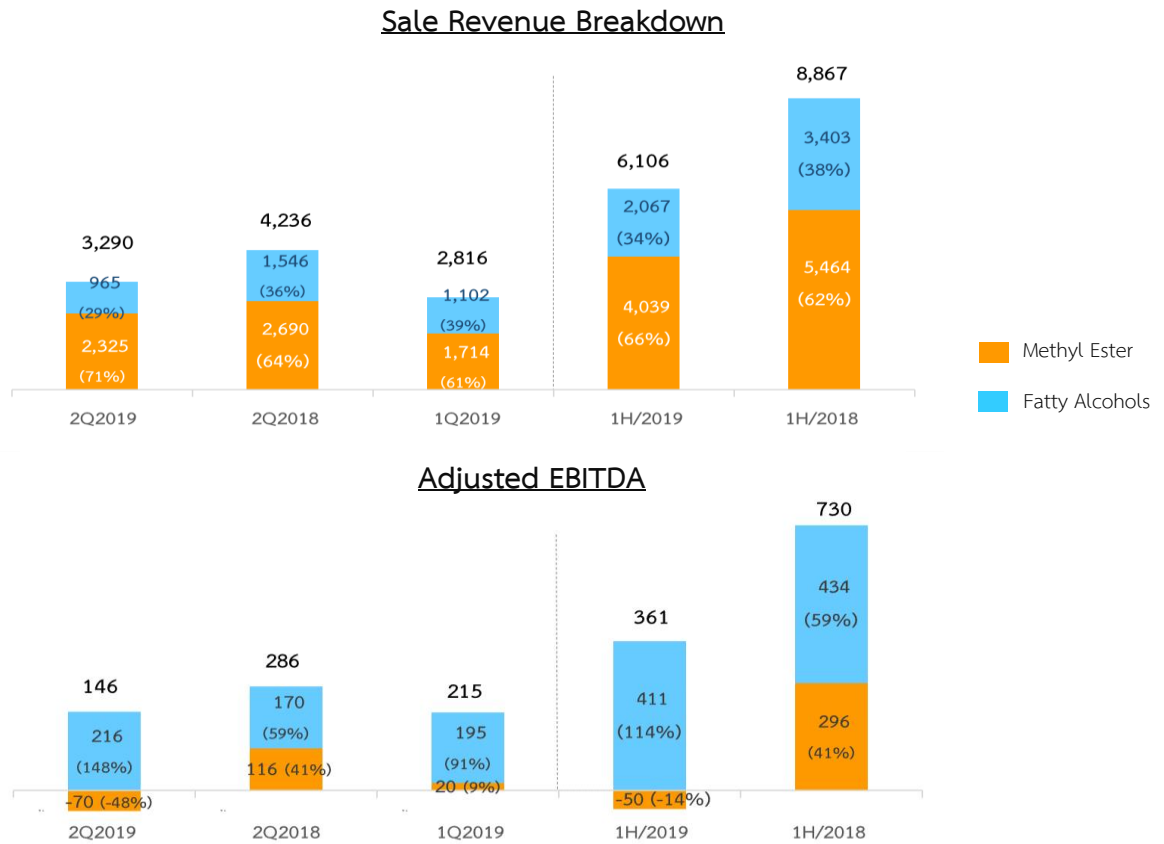
Note :

(1) Adjusted EBITDA refers to EBITDA excluding impact of Stock Gain/(Loss) and NRV

(2) Extra items were expenses from raw materials derogation amounting to THB 2,004 million net of tax income from deferred tax assets amounting to THB 84 million.

(3) The income was from reversal of inventory derogation because a supplier had delivered raw materials to the company regarding to the settlement agreement.

Exhibit 2 : Sales revenue and Adjusted EBITDA breakdown by business unit comparison of 2Q/2019 vs. 2Q/2018 vs. 1Q/2019 vs. 1H2019 vs. 1H2018 (million THB)



## Market Overview by business

### Methyl Ester (Biodiesel)

Exhibit 3: Product and Feedstock Prices

Average Price	2Q/2019	2Q/2018	% YoY	1Q/2019	% QoQ	1H/2019	1H/2018	% YoY
Methyl Ester (B100) (Baht/litre) <sup>(1)</sup>	21.17	25.03	-15%	20.74	2%	20.96	24.85	-16%
Methyl Ester (B100) (Baht/kg) <sup>(2)</sup>	24.48	28.94	-15%	23.98	2%	24.23	28.73	-16%
Crude Palm Oil (CPO) (Baht/kg) <sup>(3)</sup>	17.21	20.78	-17%	16.04	7%	16.63	20.56	-19%
EPPO P2F (Baht/kg) <sup>(4)</sup>	4.84	5.13	-6%	4.87	-1%	4.85	5.13	-5%
Biodiesel Mandate	B7	B7		B7		B7	B7	

- Note :
- (1) Reference Price of EPPO
  - (2) Conversion ratio: 0.865 Tons = 1,000 Liters
  - (3) Reference Price of DIT
  - (4) Market ME Price - Mixed Feedstock according to EPPO's B100 formula

An average of the 2Q/2019 crude palm oil price (CPO-DIT) was at 17.21 Baht/kg, being less than 2Q/2018 by 3.57 Baht/kg or down 17%, which was the same direction as the soften in Malaysian crude palm oil price (CPO-MPOB) due to high inventory and Thailand crude palm oil was continuously reap to market. On the domestic methyl ester demand, it was estimated at 386,865 tons, an increase of 55,158 tons or 17% from 2Q/2018 driven by the stimulus measurements by the government to promote biodiesel consumption such as subsidizing on B20 and B10 to be lower than B7 at 5 Baht/litre and 1 Baht/litre respectively, resulted to B20 and B10 consumption growth. Besides, the leading vehicle manufacture brands have accepted B20 and B10 to be used in their car models and have promoted the use of B20 to customers. However, due to the lower crude palm oil price, methyl ester price in 2Q/2019 was at 24.48 Baht/kg, dropped by 4.46 Baht/kg or down 15% from the same period of previous year.

Compared to 1Q/2019, crude palm oil price was risen by 1.17 Baht/kg or 7% because the inventory level was less than 300,000 tons in 2Q/2019 since the government has delegated EGAT to purchase additional 200,000 tons of crude palm oil for electricity generation and demand of energy sector has been growing continuously driven by stimulating measurements by the government. As a result, methyl ester demand in 2Q/2019 was increased from 1Q/2019 by 34,151 tons or 10%, which was equal to 386,865 tons, even it was going into rainy season in this quarter. Due to domestic crude palm oil price rising, methyl ester price was increased to 24.48 Baht/kg, rising from the previous quarter by 0.50 Baht/kg or 2%.

The average EPPO P2F in 2Q/2019 (the difference between ME EPPO price and mixed feedstock prices) was at 4.84 Baht/kg, decreased by 0.29 Baht/kg or 6% from 2Q/2018 mainly because methanol price a factor in the ME EPPO price formula decreased, while EPPO P2P in 2Q/2019 was close to previous quarter.

Considering 1H/2019 and 1H/2018 comparison, crude palm oil price was dropped to 16.63 Baht/kg, decreasing by 3.93 Baht/kg or 19% due to high level of crude palm oil inventory and rising of crude palm oil output continuously. Consequently, methyl ester price in

1H/2019 was at 24.23 Baht/kg, a decrease of 4.50 Baht/kg, or 16% from 1H/2018. Concurrently, the EPPO P2F decreased due to lower of methanol price.

## Fatty Alcohols

Exhibit 4 : Products and Feedstocks' prices

Average Price (USD per ton)	2Q/2019	2Q/2018	% YoY	1Q/2019	% QoQ	1H/2019	1H/2018	% YoY
Fatty Alcohols <sup>(1)</sup>								
- Short Chain	3,030	3,845	-21%	3,249	-7%	3,140	3,731	-16%
- Mid Cut	1,110	1,402	-21%	1,241	-11%	1,176	1,599	-26%
- Long Chain	1,108	1,310	-15%	1,183	-6%	1,146	1,291	-11%
Average Fatty Alcohols <sup>(2)</sup>	1,263	1,570	-20%	1,385	-9%	1,324	1,677	-21%
Crude Palm Kernel Oil (CPKO) <sup>(3)</sup>	554	921	-40%	677	-18%	615	1,029	-40%
Market P2F of Fatty Alcohols	599	465	29%	573	5%	586	442	33%

Note : (1) Reference Price of ICIS

(2) Average price of fatty alcohols with production proportion: Short Chain 8% Mid Cut 62% and Long Chain 30%

(3) Reference Price of Malaysian Palm Oil Board (MPOB)

Average crude palm kernel oil price (MPOB) in 2Q/2019 was at 554 USD/ton, dropped from 2Q/2018 by 367 USD/ton or 40% and when compared to the previous quarter, it was decreased by 123 USD/ton or 18%. This was because international palm oil stock was still at a high level driven by rising of its output while demand of crude palm kernel oil for edible oils and oleo chemicals was not growing that much.

Natural fatty alcohols in 2Q/2019 has shown steady demand compared to 2Q/2018 and 1Q/2019 although, natural fatty alcohols price was more attractive than synthetic fatty alcohols price, and fatty alcohols supply has been tight because of the announcement of shutdown of fatty alcohols plants in some countries. The average of 2Q/2019 natural fatty alcohols price was at 1,263 USD/ton, decreased by 307 USD/ton or 20% from 2Q/2018 and

declined by 122 USD/ton or 9% compare to 1Q/2019 mainly from crude palm kernel oil price declined.

Due to tight supply, market P2F of natural fatty alcohols in 2Q/2019 was at 599 USD/ton, improved by 134 USD/ton or 29% from 2Q/2018 and increased by 26 USD/ton or 5% from 1Q/2019.

In summary, market for 1H/2019 vs. 1H/2018, crude palm kernel oil price stood at 615 USD/ton, dramatically dropped by 414 USD/ton or 40% mainly from international high stock level of palm oil. With downward trend in crude palm kernel oil price has made the average of natural fatty alcohols price in 1H/2019 to be lower than 1H/2018. While market P2F of natural fatty alcohols in 1H/2019 has improved from 1H/2018 which driven by tight supply.



## Operating Performance by business unit

### Methyl Ester (ME) Business Unit Operating Performance

Exhibit 5 : Keys Operating Performance of ME Business Unit

Methyl Ester Business	2Q2019	2Q2018	% YoY	1Q2019	% QoQ	1H2019	1H2018	% YoY
Utilization (%)	81% <sup>(1)</sup>	108%	-27%	102%	-21%	71%	113%	-42%
Sales Volume (ton) <sup>(2)</sup>	111,590 <sup>(4)</sup>	90,100	24%	94,703 <sup>(3)</sup>	18%	206,293 <sup>(5)</sup>	192,854	7%
Sales Volume (million litre) <sup>(6)</sup>	129	104	24%	109	18%	238	223	7%
Sales Revenue (million baht)	2,325	2,690	-14%	1,714	36%	4,039	5,464	-26%
EBITDA (million baht)	-55	106	-152%	2	-2,850%	-53	269	-120%
EBITDA margin (%)	-2.4%	3.9%	-6.3%	0.1%	-2.5%	-1.3%	4.9%	-6.2%
Stock Gain/(Loss) & NRV(million baht)	15	-10	-250%	-18	-183%	-3	-27	89%
Adjusted EBITDA (million baht) <sup>(7)</sup>	-70	116	-160%	20	-450%	-50	296	-117%
Adjusted EBITDA Margin (%)	-3.0%	4.3%	-7.3%	1.2%	-4.2%	-1.2%	5.4%	-6.6%

Note : (1) Nameplate Capacity 500,000 tons per year from methyl ester plant 1 and plant 2 with nameplate 300,000 and 200,000 ton per year respectively.

(2) Methyl Ester sales volume shown in table has already included sales volume from methyl ester plant 2.

(3) In 1Q/2019, GGC had sales volume from methyl ester plant 2 of 15,678 tons. However, the company could only realize the total sales volume from methyl ester plant 1 because methyl ester plant 2 was under testing run for commercial operation.

(4) In 2Q/2019, GGC noticed the commercial operating of methyl ester plant 2, on April 5, 2019, as a result, sales volume of methyl ester during April 1-4, 2019 amounting to 1,615 tons could not be recorded in profit/loss statement.

(5) In 1H/2019, GGC had sales volume from methyl ester plant 2 of 17,293 tons which could not be recorded in profit/loss statement because it was under testing run for commercial operation.

(6) Conversion ratio: 0.865 Tons = 1,000 Liters

(7) Adjusted EBITDA refers to EBITDA excluding impact of Stock Gain/(Loss) and NRV

### Operating performance comparison between 2Q/2019 vs. 2Q/2018

In 2Q/2019, the company recorded methyl ester sales revenue of THB 2,325 million, declined from 2Q/2018 by 14%, because methyl ester price dropped in relation to crude palm oil price declined and glycerine price decreased due to ample supply. However, the company had improved sales volume to 111,590 tons or up 24%, although, the company had plan to turnaround methyl ester plant 1 for maintenance in June 2019 for 11 days. However, the methyl ester plant 2 has started the commercial operating on April 5, 2019 so the methyl ester sales

volume was sufficient to support the increasing biodiesel demand affected from stimulus measurements by the government. In addition, the company had also export methyl ester amounting to 6,800 tons.

Additionally, the company was impacted by recorded of accrued payable for labor regulation amendment, in which the maximum severance pay rate is amended from 300 days to be 400 days of the employee's latest wage rate for an employee who has worked for 20 consecutive years or more. Moreover, there were the extraordinary expenses recorded in this quarter which are the maintenance expenses of the major shutdown and the advisory fee from the raw materials derogation issue. Based on these factors, EBITDA was recorded at THB -55 million, a decrease of 152%. When deducting the effect of Stock Gain & NRV of THB 15 million, the company reported Adjusted EBITDA of THB -70 million, a decrease of 160% from 2Q/2018.

#### Operating performance comparison between 2Q/2019 vs. 1Q/2019

On quarter by quarter basis, methyl ester business unit's revenue in 2Q/2019 stood at THB 2,325 million, improved by THB 611 million or up 36%, though the company had impact from a decrease in glycerine price following ample glycerine supply. However, as methyl ester demand increasing and opportunity to export methyl ester, the company's sales volume in 2Q/2019 was increased by 16,887 tons or 18% compare to 1Q/2019 and rose by 30,950 tons or 39% if considering the sales volume that could realize in profit/loss statement.

Furthermore, there were the extraordinary expenses recorded in this quarter which are labor regulation amendment, the maintenance expenses of the major shutdown and the advisory fee from the raw materials derogation issue. As a result, the company reported EBITDA of THB -55 million, improved from 1Q/2019 of THB -57 million. When deducting the effect of Stock Gain & NRV of THB 15 million, Adjusted EBITDA was recorded at THB -70 million, dropped by THB 90 million or 450%.

### Operating performance comparison between 1H/2019 vs. 1H/2018

In 1H/2019, the company reported methyl ester revenue of THB 4,039 million, decreased from 1H/2018 by THB 1,425 million or 26% despite of 1H/2019 sales volume amounting to 206,293 tons, improved by 7% from 1H/2018 in contrast with sales volume amounting to 189,000 tons in 1H/2019, decreased by 3,854 tons or 2% from 1H/2018 if considering the sales volume that could realize in profit/loss statement. In addition, the lower sales revenue was also due to the fact that methyl ester price dropped in relation to crude palm oil price declined and glycerine price decreased due to ample supply.

Besides, there were the extraordinary expenses recorded in this quarter which are labor regulation amendment, the maintenance expenses of the major shutdown and the advisory fee from the raw materials derogation issue. Therefore, the company reported EBITDA of THB -53 million, dropped from 1H/2018 by 120%. When deducting the effect of Stock Loss & NRV of THB 3 million, Adjusted EBITDA was recorded at THB -50 million, declined by 117% from 1H/2018.

## Fatty Alcohol (FA) Business Unit Operating Performance

Exhibit 6 : Keys Operating Performance of FA Business Unit

Fatty Alcohols Business	2Q/2019	2Q/2018	% YoY	1Q/2019	% QoQ	1H/2019	1H/2018	% YoY
Utilization (%)	84%	120%	-36%	111%	-27%	97%	110%	-13%
Sales Volume (Ton)	24,245	30,209	-20%	24,798	-2%	49,043	54,444	-10%
Revenue from Sales (million baht)	965	1,546	-38%	1,102	-12%	2,067	3,403	-39%
EBITDA (million baht)	143	31	361%	139	3%	282	79	257%
EBITDA margin (%)	14.8%	2.0%	12.8%	12.6%	2.2%	13.6%	2.3%	11.3%
Stock Gain/(Loss) & NRV	-73	-139	47%	-56	-30%	-129	-355	64%
Adjusted EBITDA (million baht) <sup>(1)</sup>	216	170	27%	195	11%	411	434	-5%
Adjusted EBITDA Margin (%)	22.4%	11.0%	11.4%	17.7%	4.7%	19.9%	12.8%	7.1%

Note : (1) Adjusted EBITDA refers to EBITDA excluding impact of Stock Gain/(Loss) and NRV

### Operating performance comparison between 2Q/2019 vs. 2Q/2018

Fatty alcohols business recorded revenue of THB 965 million in 2Q/2019, decreased from 2Q/2018 by 38% mainly due to the decreasing of natural fatty alcohols sales volume of 24,245 tons or down 20% caused by the shutdown for maintenance and catalyst changing in June for 20 days and a decrease in natural fatty alcohols price following crude palm kernel oil price declined. However, the company had EBITDA of THB 143 million, increased by 361% from 2Q/2018 due to market improvement. In addition, as the company was impacted from stock loss amounting to THB 73 million which decreased from 2Q/2018 by THB 66 million or 47%, therefore, the company had Adjusted EBITDA for THB 216 million, increased from 2Q/2018 by THB 46 million or up 27%

### Operating performance comparison between 2Q/2019 vs. 1Q/2019

On quarter by quarter basis, the revenue of fatty alcohol business was recorded at THB 965 million, decreased from 1Q/2019 by THB 137 million or 12%, primarily due to the declining of natural fatty alcohols price driven by crude palm kernel oil price softness and

slightly decreasing in sales volume of fatty alcohols by 2% from prior quarter. However, EBITDA was reported at THB 143 million, an increase of 3% from previous quarter mainly due to market improvement. Meanwhile, the company had been affected from Stock Loss & NRV of THB -73 million driven by declining of crude palm kernel oil price. Hence, Adjusted EBITDA was reported at THB 216 million, an increase of 11% compare to 1Q/2019.

#### [Operating performance comparison between 1H/2019 vs. 1H/2018](#)

In 1H/2019, fatty alcohols business recorded revenue of THB 2,067 million, a decrease of THB 1,336 million or down 39% from 1H/2018 primarily from declining of sales volume to 49,043 tons or decreased by 10% because the company had shutdown fatty alcohols plant for 31 days in 1H/2019 in contrast with 15 days in 1H/2018. In addition, natural fatty alcohols price decreased due to crude palm kernel oil price declined. However, the company could generate EBITDA at THB 282 million, increased by 257% driven by improving of market situation. The company had been impacted from Stock Loss & NRV for THB 129 million, declined from 1H/2018 by THB 226 million, hence, the company had Adjusted EBITDA of THB 411 million, a decrease of 5% from 1H/2018.

## Consolidated Profit & Loss statement

Exhibit 7 : Consolidated Profit &amp; Loss Statement comparison of 2Q/2019, 2Q/2018 and 1Q/2019

	2Q2019		2Q2018		YoY		1Q2019		QoQ	
	MB	%	MB	%	MB	%	MB	%	MB	%
<b>Sale Revenue</b>	3,290	100	4,236	100	(946)	(22)	2,816	100	474	17
Feedstock	(2,388)	(73)	(3,285)	(78)	897	(27)	(1,975)	(70)	(413)	21
Net Realizable Value (NRV)	10	0	-	0	10	n.a.	(7)	(0)	17	(243)
<b>Product to Feed Margin</b>	<b>912</b>	<b>28</b>	<b>951</b>	<b>22</b>	<b>(39)</b>	<b>(4)</b>	<b>834</b>	<b>30</b>	<b>78</b>	<b>9</b>
Variable Costs	(486)	(15)	(485)	(11)	(1)	0	(403)	(14)	(83)	21
Fixed Costs	(177)	(5)	(130)	(3)	(47)	36	(133)	(5)	(44)	33
Stock Gain/(Loss)	(68)	(2)	(149)	(4)	81	(54)	(67)	(2)	(1)	1
SG&A	(107)	(3)	(83)	(2)	(24)	29	(112)	(4)	5	(4)
Other Income	14	0	33	1	(19)	(58)	22	1	(8)	(36)
<b>EBITDA</b>	<b>88</b>	<b>3</b>	<b>137</b>	<b>3</b>	<b>(49)</b>	<b>(36)</b>	<b>141</b>	<b>5</b>	<b>(53)</b>	<b>(38)</b>
Depreciation and Amortization	(131)	(4)	(133)	(3)	2	(2)	(111)	(4)	(20)	18
<b>EBIT</b>	<b>(43)</b>	<b>(1)</b>	<b>4</b>	<b>0</b>	<b>(47)</b>	<b>(1,175)</b>	<b>30</b>	<b>1</b>	<b>(73)</b>	<b>(243)</b>
Net Financial Costs	(4)	(0)	(8)	(0)	4	(50)	(4)	(0)	0	n.a.
FX Gain/Loss <sup>(1)</sup>	(2)	(0)	44	1	(46)	(105)	(3)	(0)	1	(33)
Share of Profit/(Loss) from investment	16	0	27	1	(11)	(41)	1	0	15	1,500
Income Tax Expenses	(3)	(0)	-	-	(3)	n.a.	(4)	(0)	1	(25)
<b>Net Profit bef extra items</b>	<b>(36)</b>	<b>(1)</b>	<b>67</b>	<b>2</b>	<b>(103)</b>	<b>(154)</b>	<b>20</b>	<b>1</b>	<b>(56)</b>	<b>(280)</b>
Item from raw materials derogation	14	0	(2,004)	(47)	2,018	(101)	2	0	12	600
Tax income from deferred tax assets	-	-	84	2	(84)	(100)	-	-	-	n.a.
Extra items <sup>(2)</sup>	14	0	(1,920)	(45)	1,934	(101)	2	0	12	600
<b>Net Profit after extra items</b>	<b>(22)</b>	<b>(1)</b>	<b>(1,853)</b>	<b>(44)</b>	<b>1,831</b>	<b>(99)</b>	<b>22</b>	<b>1</b>	<b>(44)</b>	<b>(200)</b>

Notes : (1) Including Gain/(Loss) from FX and Derivatives

(2) Extra items were the item from raw material derogation and tax income from deferred tax assets.

Exhibit 8 : Consolidated Profit &amp; Loss Statement comparison 1H/2019 and 1H/2018

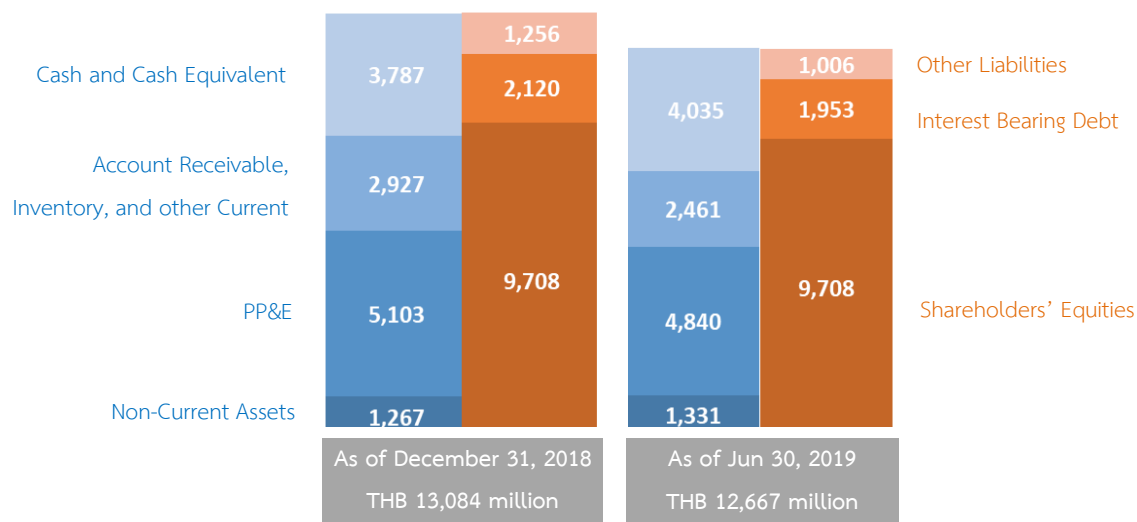
	1H2019		1H2018		YoY	
	MB	%	MB	%	MB	%
<b>Sale Revenue</b>	6,106	100	8,867	100	(2,761)	(31)
Feedstock	(4,363)	(71)	(6,807)	(77)	2,444	(36)
Net Realizable Value (NRV)	3	0	2	0	1	0
<b>Product to Feed Margin</b>	<b>1,746</b>	<b>29</b>	<b>2,062</b>	<b>23</b>	<b>(316)</b>	<b>(15)</b>
Variable Costs	(889)	(15)	(980)	(11)	91	(9)
Fixed Costs	(310)	(5)	(256)	(3)	(54)	21
Stock Gain/(Loss)	(135)	(2)	(384)	(4)	249	(65)
SG&A	(219)	(4)	(155)	(2)	(64)	41
Other Income	36	1	61	1	(25)	(41)
<b>EBITDA</b>	<b>229</b>	<b>4</b>	<b>348</b>	<b>4</b>	<b>(119)</b>	<b>(34)</b>
Depreciation and Amortization	(242)	(4)	(272)	(3)	30	(11)
<b>EBIT</b>	<b>(13)</b>	<b>(0)</b>	<b>76</b>	<b>1</b>	<b>(89)</b>	<b>(117)</b>
Net Financial Costs	(8)	(0)	(13)	(0)	5	(38)
FX Gain/Loss <sup>(1)</sup>	(5)	(0)	17	0	(22)	(129)
Share of Profit/(Loss) from investment	17	0	47	1	(30)	(64)
Income Tax Expenses	(7)	(0)	4	0	(11)	(275)
<b>Net Profit bef extra items</b>	<b>(16)</b>	<b>0</b>	<b>131</b>	<b>1</b>	<b>(147)</b>	<b>(112)</b>
Item from raw materials derogation	16	0	(2,004)	(23)	2,020	(101)
Tax income from deferred tax assets	-	-	84	1	(84)	(100)
<b>Extra items<sup>(2)</sup></b>	<b>16</b>	<b>0</b>	<b>(1,920)</b>	<b>(22)</b>	<b>1,936</b>	<b>(101)</b>
<b>Net Profit after extra items</b>	<b>0</b>	<b>0</b>	<b>(1,789)</b>	<b>(20)</b>	<b>1,789</b>	<b>(100)</b>

Notes : (1) Including Gain/(Loss) from FX and Derivatives

(2) Extra items were the item from raw material derogation and tax income from deferred tax assets.

## Statement of Financial Position

Exhibit 9 : Consolidated Financial Position as of June 30, 2019 and as of December 31, 2018



## Assets

As of June 30, 2019, the company had total assets of THB 12,667 million, a decrease of THB 417 million when compared to December 31, 2018 in which key changes are described as follows;

1. account receivable and other receivables were decreased by THB 413 million mainly from the declining of products prices compared to the end of the 2018;
2. inventory was decreased by THB 59 million because the company had to reserve more raw materials for production during New Year 2019 and raw material prices declined;
3. cash and cash equivalent were increased by THB 248 million caused by the decreasing of working capital;
4. non-current assets were increased by THB 200 million primarily from capital injection to GGC KTIS Bio Industrial Company Limited (GKBI) amounting to THB 180 million.



## Liabilities

As of June 30, 2019, the company had total liabilities of THB 2,959 million, a decrease of THB 417 million or 12% when compared to December 31, 2018, mainly attributed to

1. account payable was decreased by THB 151 million because the company had to reserve more raw materials for production during New Year 2019 and raw material prices declined;
2. payable to contractor was decreased by THB 71 million due to payment to contractor as per methyl ester plant 2 progress;
3. long term borrowings from financial institutions was decreased by THB 220 million due to loan repayment as per schedule;
4. estimating the amount of employee benefit was increased by THB 22 million mainly from labor regulation amendment, in which severance pay rate is amended from 300 days to 400 days of the employee's latest wage rate. .

## Shareholder's equities

As of June 30, 2019, the company had total shareholder's equity of THB 9,708 million which was equal to December 31, 2018, resulted from the profit of THB 0 million in 1H/2019.

## Statement of Cash Flows

The company had cash from operating activities of THB 660 million mainly from a decrease of account receivable and inventory.

The company had cash from investing activities of THB 694 million because short-term investment at financial institutions reached maturity of THB 900 million, dividend received from Thai Ethoxylate Co, Ltd. (TEX) and interest income of THB 148 million. In addition, the company had injected equity of THB 180 million to GKBI. Additionally, there was cash spending for investment in PP&E for THB 174 million, mainly from investing in methyl ester plant 2.

The company had cash flow spending for financial activities of THB 205 million, which was spent for principal and interest payment, financial fee and financial leases.

### Key Financial Ratios

Exhibit 10 : Key Financial Ratios comparison of 2Q/2019, 2Q/2018 and 1Q/2019

Key Financial Ratio	2Q/2019	2Q/2018	1Q/2019
Current ratio (x)	4.9	4.0	5.2
EBITDA to sales revenue (%)	2.7	3.2	5.0
Net profit to sales revenue (%)	(0.7)	(43.7)	0.8
Return on total assets (%)	3.4	(10.9)	(10.9)
Return on equity (%)	6.7	(14.8)	(11.5)
Debt to equity (x)	0.3	0.4	0.3
Interest bearing debt to equity (x)	0.2	0.2	0.2
Interest bearing debt to EBITDA (x)	2.4	2.4	2.5

Notes:

Current ratio (x)	=	Current assets divided by current liabilities
EBITDA to sales revenue (%)	=	EBITDA divided by sale volume
Net profit to sales revenue (%)	=	Net profit divided by sales revenue
Return on total assets (%)	=	Net profit divided by average total assets
Return on equity (%)	=	Net profit divided by average equities attributed to owners of the company
Debt to equity (x)	=	Total debt divided by shareholders' equities
Interest bearing debt to equity (x)	=	Interest bearing debt divided by shareholder' equities
Interest bearing debt to EBITDA (x)	=	Interest bearing debt divided by EBITDA