



Management's Discussion and Analysis

For the operating results of 1Q2018

Global Green Chemicals Public Company Limited

Executive Summary

In 1Q2018, Domestic palm oil production has increased as well as in other countries after the drought occurred in FY2016, consequence to lower Crude Palm Oil(CPO) prices and Crude Palm Kernel Oil(CPKO) prices than that of 1Q2017. Under these circumstances, the government has maintained B7 mandate in this quarter, comparing to the mandate of B5 back in 1Q2017. For Natural Fatty Alcohols (FA) market, in 1Q2018, it was better than 1Q2017, as Natural FA price was being more competitive to Synthetic FA price. This was mainly due to softer CPKO prices.

From above reasons, GGC operated full capacity which resulted Methyl Ester(ME) sales volume of 102,754 tons, increased by 33,549 tons or up by 48% yoy, and FA sales volume of 24,235 tons, grew higher by 4,345 tons or up 22% yoy.

The company revenue were posted of THB 4,631 million in 1Q2018, increased by THB 385 million or up 9% yoy from the same period last year. However, the company reported EBITDA of THB 211 million (down 32% yoy) because EBITDA from FA business was lower due to stock loss as CPKO price drop. Moreover, the company recognized profit of THB 20 million from investments in the Thai Ethoxylate Company Limited (TEX) which producing Fatty Alcohol Ethoxylate (Derivative product of FA). The company also recognized loss of THB 0.09 million from investments in the Thai Eastern Top Seeds Oil Company Limited (TETSO), as TETSO have started commercial run in late March 2018. Therefore, TETSO has not yet to be recognized for the revenues from operations. Lastly the company was also impacted from the Baht appreciation from 32.44 USD/ton in January 2018 to 31.23 USD/ton in March 2018 (up 4%). As a result, the company reported profit for the period of THB 64 million, decreased by 56% yoy.

The Company reported financial position as of 31 March 2018 with total assets of THB 14,489 million (which comprised of cash and short-term investment amounted to THB 4,743 million); with total liabilities of THB 3,352 million; with total equities of THB 11,137 million.

Operating Performance

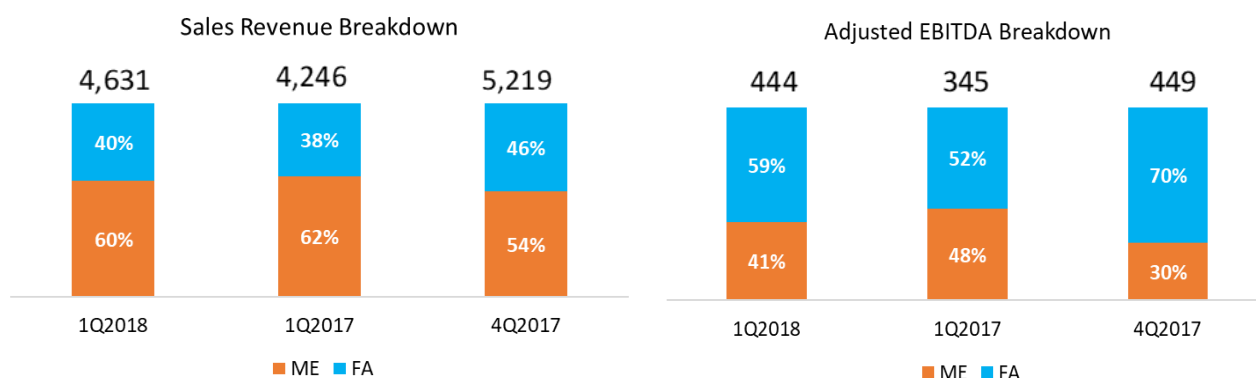
Exhibit 1 : Consolidated Performance comparison of 1Q2018 vs. 1Q2017 vs. 4Q2017

UNIT: million baht	1Q2018	1Q2017	% yoy	4Q2017	% qoq
Sales Revenue	4,631	4,246	9%	5,219	-11%
EBITDA	211	312	-32%	387	-45%
EBITDA Margin (%)	4.6%	7.3%	-2.7%	7.4%	-2.8%
Stock Gain/(Loss) & NRV	-233	-33	606%	-62	276%
Adjusted EBITDA ⁽¹⁾	444	345	29%	449	-1%
Adjusted EBITDA Margin (%)	9.6%	8.1%	1.5%	8.6%	1.0%
Net Profit	64	145	-56%	251	-75%
EPS (Baht/share)	0.06	0.20	-70%	0.24	-75%

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

Exhibit 2 : Sales Revenue and Adjusted EBITDA breakdown by business unit comparison of 1Q2018 vs. 1Q2017 vs. 4Q2017

(million baht)



Market Overview by business

Methyl Ester (ME or B100)

Exhibit 3: Product and Feedstock Prices

Average Price	1Q2018	1Q2017	% yoy	4Q2017	% qoq
Methyl Ester (B100) (Baht/litre) ⁽¹⁾	24.66	34.20	-28%	24.76	0%
Methyl Ester (B100) (Baht/kg.) ⁽²⁾	28.51	39.54	-28%	28.62	0%
Crude Palm Oil (CPO) (Baht/kg.) ⁽³⁾	20.34	30.78	-34%	20.48	-1%
EPPO P2F (Baht/kg.) ⁽⁴⁾	5.14	5.17	-1%	4.93	4%
Biodiesel Mandate	B7	B5		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 1Q2018 CPO(CPO-DIT) price was at 20.34 Baht/kg, being lower than 1Q2017 CPO price by 10.44 Baht/kg or down 34% yoy. This was led by domestic palm oil inventory surplus more than 400,000 tons in 1Q2018, while, in the past, Thailand used to have an average palm oil inventory level of 200,000 - 250,000 tons. For ME domestic demand in 1Q2018, it is estimated be approximately around 365,000 tons, increased by 108,000 tons or up 42% yoy, which was resulted from mandate of B7 that was being applied in 1Q2018 vs. mandate of B5 that was being applied in 1Q2017. In addition, the government launched the policy to alleviate the domestic palm oil surplus level by asking fuel traders M.7 for collaboration to keep much higher inventory of ME in order to absorb the surplus of CPO. As a result, ME domestic demand grew higher than usual. As CPO price dropped in 1Q2018, ME prices was reported at 28.51 Baht/kg, decreased by 11.03 Baht/kg or down 28% yoy.

On qoq basis, CPO price in 1Q2018 was lower by 0.14 Baht/kg to at 20.34 Baht/kg. As a result, ME price in 1Q2018 was at 28.51 Baht/kg, decreased by 0.11 Baht/kg. On the demand side, ME domestic demand in 1Q2018 rose by 38,000 tons or 12% qoq to 365,000 tons from 4Q2017's, mainly due to higher diesel consumption from transportation sector as well as the government asked fuel traders to keep more ME inventory.

In 1Q2018, EPPO P2F (the difference between EPPO ME price and mixed feedstock prices) was flat, yoy . On the qoq basis, EPPO P2F increased by 0.21 baht/kg or up by 4% qoq mainly from higher methanol price in 1Q2018.

Fatty Alcohols

Exhibit 4 : Products and Feedstocks' prices

Average Price (USD per ton)	1Q2018	1Q2017	% yoy	4Q2017	% qoq
Fatty Alcohols ⁽¹⁾					
- Short Chain	3,618	3,211	13%	3,500	3%
- Mid Cut	1,796	2,507	-28%	2,177	-18%
- Long Chain	1,271	1,441	-12%	1,414	-10%
Average Fatty Alcohols ⁽²⁾	1,784	2,243	-20%	2,054	-13%
Crude Palm Kernel Oil (CPKO) ⁽³⁾	1,138	1,516	-25%	1,304	-13%
Market P2F of Fatty Alcohols	419	424	-1%	488	-14%

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)

CPKO MPOB price in 1Q2018 was in the downward trend. 1Q2018 CPKO price was at 1,138 USD/ton, decreased by 378 USD/ton or 25% yoy and decreased by 166 USD/ton or 13% qoq . This was due to the fact that palm oil production was flooded into market after El nino effect elapsed that led the weather situation back to normal state, and consequence to the continuous growth of palm oil inventory. Furthermore, some countries have raised import duties for palm oil which have diminished market demand.

Natural FA demand improved from 1Q2017, mainly due to downward pricing trend of Natural FA to below Synthetic FA because of downward pricing trend of CPKO. Whereas, the demand in this quarter was lower qoq, primarily due to low seasonal demand from post New Year Gifting Season and Chinese New Year.

On qoq basis, 1Q2018 Market P2F of FA was relatively flat which amounted to 419 USD/ton. Comparing to 4Q2017, market P2F of FA was declined by 69 USD/ton or down 14% qoq, attributable to the higher supply in the market due to some FA producers have restarted their production after they temporarily reduced their operation due to feedstock price volatility in 2017.

Operating Performance by business unit

Methyl Ester (ME) Business Unit Operating Performance

Exhibit 5 : Keys Operating Performance of ME Business Unit

	1Q2018	1Q2017	% yoy	4Q2017	% qoq
Utilization (%) ⁽¹⁾	119%	86%	33%	100%	19%
Sales Volume (ton) ⁽²⁾	102,754	69,205	48%	91,716	12%
Sales Volume (million litre)	119	80	49%	106	12%
Sales Revenue (million baht)	2,774	2,643	5%	2,836	-2%
EBITDA (million baht)	163	131	24%	85	92%
EBITDA margin (%)	5.9%	5.0%	0.9%	3.0%	2.9%
Stock Gain/(Loss) & NRV(million baht)	-17	-32	-47%	-48	-65%
Adjusted EBITDA (million baht) ⁽³⁾	180	163	10%	133	35%
Adjusted EBITDA Margin (%)	6.5%	6.2%	0.3%	4.7%	1.8%

Note : (1) Nameplate Capacity 300,000 Tons per year

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

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

Operating performance comparison between 1Q2018 vs. 1Q2017

In 1Q2018, the company reported ME revenue of THB 2,774 million (up 5% yoy), as a result of 48% yoy higher sale volume from B7 mandate that applied in this quarter vs. B5 mandate in 1Q/2017 and higher revenues yoy from sales of byproduct. However, with softness of CPO price, the company could source less competitive CPO and had got stock loss & NRV of THB 17 million. As a result, the company reported EBITDA of THB 163 million (up 24% yoy), and had Adjusted EBITDA of THB 180 million (up 10% yoy).

Operating performance comparison between 1Q2018 vs. 4Q2017

The company's ME revenue was decreased by 2% qoq, though the company was able to sell more of ME sales volume of 102,754 tons (up 12% qoq) owing to the government asking fuel traders M.7 for collaboration to stock more of ME inventory. However, revenue from by product and goods for trade were decreased. Therefore, the company reported EBITDA of THB 163 million improved by 92% qoq due to improving of feed stock management. In addition, the company recognized lower stock loss & NRV than previous quarter by THB 31 million due to slowing pace of downward trend of CPO prices. Therefore, the company had adjusted EBITDA of ME, THB 180 million (up 35% qoq).

Fatty Alcohol (FA) Business Unit Operating Performance

Exhibit 6 : Keys Operating Performance of FA Business Unit

	1Q2018	1Q2017	% yoy	4Q2017	% qoq
Utilization (%)	101%	89%	12%	121%	-20%
Sales Volume (Ton)	24,235	19,890	22%	32,045	-24%
Revenue from Sales (million baht)	1,857	1,603	16%	2,383	-22%
EBITDA (million baht)	48	180	-73%	303	-84%
EBITDA margin(%)	2.6%	11.2%	-8.6%	12.7%	-10.1%
Stock Gain/(Loss) & NRV	-216	-1	21500%	-14	1443%
Adjusted EBITDA (million baht) ⁽¹⁾	264	181	46%	316	-16%
Adjusted EBITDA Margin (%)	14.2%	11.3%	2.9%	13.3%	0.9%

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

[Operating performance comparison between 1Q2018 vs. 1Q2017](#)

FA revenues recorded THB 1,857 million in 1Q2018 (up 16% yoy), attributed to higher sales volume of 24,235 tons (up 22% yoy), because Natural FA prices could compete to Synthetic FA prices while in 1Q2017, Natural FA prices were higher than Synthetic FA prices. However, the company recorded stock loss & NRV of THB 216 million, pressured by downward trend of CPKO prices. As a result, EBITDA were recorded at THB 48 million (down 73% yoy), while adjusted EBITDA were recorded at THB 264 million (up 46% yoy) which reflected to FA market recovery.

[Operating performance comparison between 1Q2018 vs. 4Q2017](#)

On qoq basis, 1Q2018 FA sales revenues was posted THB 1,857 million (down 22% qoq) attributed to lower sale volume from low seasonal product demand, 15 days of planned maintenance for catalyst changing and lower FA prices following CPKO price sunk. As CPKO price dropped, the company recognized stock loss & NRV of THB 216 million. In summary, the company reported EBITDA of THB 48 million (down 84% qoq) and adjusted EBITDA of THB 264 million (down 16% qoq).

Consolidated Profit & Loss statement

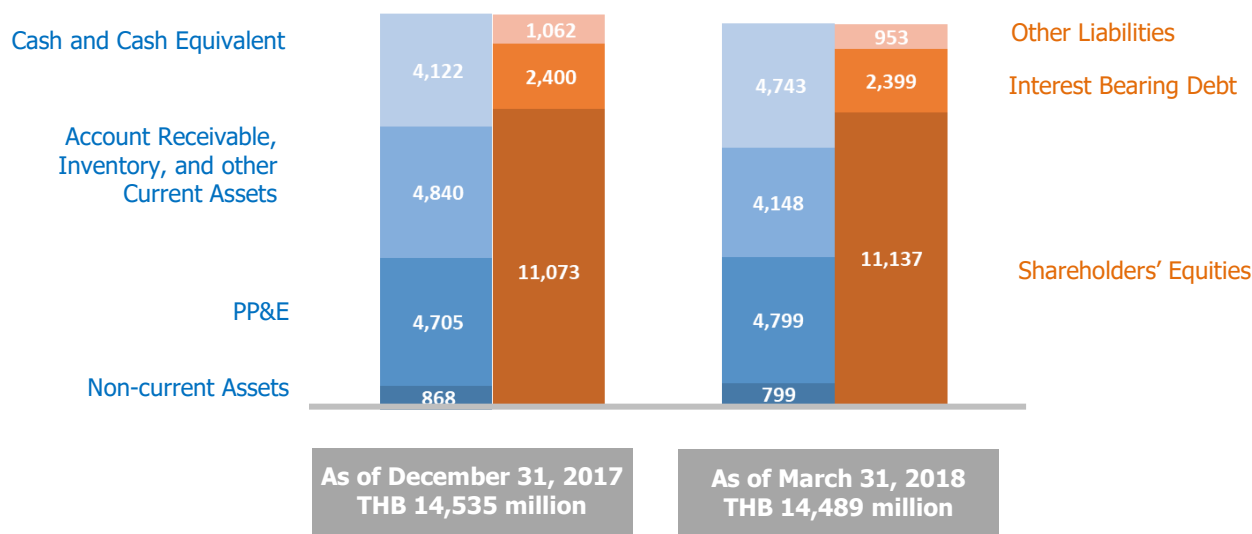
Exhibit 7 : Consolidated Profit & Loss Statement comparison of 1Q2018, 1Q2017 and 4Q2017

	1Q2018		1Q2017		yoy		4Q2017		qoq	
	MB	%	MB	%	MB	%	MB	%	MB	%
Sale Revenue	4,631	100	4,246	100	385	9	5,219	100	(588)	(11)
Feedstock	(3,522)	(76)	(3,347)	(79)	(175)	5	(4,078)	(78)	(556)	(14)
Net Realizable Value (NRV)	2	0	-	-	2	na.	(1)	(0)	3	(300)
Product to Feed Margin	1,111	24	899	21	212	24	1,140	22	(29)	(3)
Variable Costs	(495)	(11)	(355)	(8)	(140)	39	(448)	(9)	(47)	10
Fixed Costs	(126)	(3)	(139)	(3)	13	(9)	(149)	(3)	23	(15)
Stock Gain/(Loss)	(235)	(5)	(33)	(1)	(202)	612	(61)	(1)	(174)	285
SG&A	(72)	(2)	(71)	(2)	(1)	1	(114)	(2)	42	(37)
Other Income	28	1	10	0	18	180	20	0	8	40
EBITDA	211	5	312	7	(101)	(32)	387	7	(176)	(45)
Depreciation and Amortization	(139)	(3)	(138)	(3)	(1)	1	(143)	(3)	4	(3)
EBIT	72	2	174	4	(102)	(59)	244	5	(172)	(70)
Net Financial Costs	(5)	(0)	(22)	(1)	17	(77)	(8)	(0)	3	(38)
FX Gain/Loss ⁽¹⁾	(27)	(1)	(24)	(1)	(3)	13	(8)	(0)	(19)	238
Share of Profit/(Loss) from investment	20	0	30	1	(10)	(33)	27	1	(7)	(26)
Income Tax Expenses	4	0	(12)	(0)	16	(133)	(4)	(0)	8	(200)
Net Profit	64	1	145	3	(81)	(56)	251	5	(187)	(75)

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

Statement of Financial Position

Exhibit 8 : Consolidated Financial Position as of March 31, 2018 and as of December 31, 2017



Assets

As of March 31, 2018, the company had total assets of THB 14,489 million, decreased from December 31, 2017 by THB 46 million due to reasons as follow:

- a decrease from current assets of THB 71 million, which was mainly due to decreasing of account receivable of THB 397 million as a result of FA plant shut down for semiannual planned maintenance and Chinese New Year; a decreasing of inventory of THB 335 million from lower inventory volume and downward trend of product prices; nevertheless, the company had an increase of cash of THB 621 million and an increase of dividend receivable of THB 91 million from TEX

- an increase of non-current assets of THB 25 million, which was mainly due to increasing of PP&E value of THB 213 million which came from investment in ME2 project amounted to THB 198 million, offsetting by depreciation of PP&E of THB 118 million and decreasing in investment in TEX of THB 71 million due to dividend payment.

Liabilities

As of March 31, 2018, the company had total liabilities of THB 3,352 million, decreased from December 31, 2017 by THB 110 million or 3%, mainly attributable to increasing of higher accounts payable by THB 34 million, decreasing of accounts payable to construction by THB 41 million and decreasing of other payables of THB 104 million.

Shareholder's equities

As of March 31, 2018, the company had total shareholders' equities of THB 11,137 million, increased from December 31, 2017 by THB 64 million or 1% due to 1Q2018 earnings.

Statement of Cash Flows

As of March 31, 2018 the company had cash and cash equivalent THB 4,743 million increased from Dec 31, 2017 by THB 621 million. The company had cash from operating activities of THB 891 million which included 1) cash from net profit of THB 64 million, and other operating activities of THB 827 million which attributable to a decrease from accounts receivable and inventory; 2) Cash flow spent for investing activities of THB 45 million, which was spent on obtaining PP&E for THB 254 million, mainly due to investment in ME2 project about THB 198 million and received about THB 200 million cash from short-term investment; and 3) Cash Flow spent for financing activities of THB 20 million, which was from long-term loan interest payment.

Key Financial Ratios

Exhibit 9 : Key Financial Ratio comparison of 1Q2018 vs. 1Q2017 vs. 4Q2017

	1Q2018	1Q2017	4Q2017
Current ratio(x)	7.5	4.2	6.9
EBITDA to sales revenue(%)	4.6	7.3	7.4
Net profit to sales revenue(%)	1.4	3.4	4.8
Return on total assets(%)	3.0	7.2	3.8
Return on equity(%)	4.0	10.1	5.1
Debt to equity(x)	0.3	0.5	0.3
Interest bearing debt to equity(x)	0.2	0.3	0.2
Interest bearing debt to EBITDA(เท่า)	2.3	1.9	2.1

Notes : Current Ratio(Times)	=	Current assets divided by current liabilities
EBITDA to sales revenue(%)	=	EBITDA divided by sales revenue
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 attributable to owners of the company
Debt to equity(Times)	=	Total debt divided by shareholders' equities
Interest bearing debt to equity(Times)	=	Interest bearing debt divided by shareholders' equities
Interest bearing debt to EBITDA(Times)	=	Interest bearing debt divided by EBITDA