

GLOBAL GREEN CHEMICALS

THAILAND / PETROCHEM & CHEMICALS

GGC TB

BUY
 UNCHANGED

Hurt by court case provisions

- 4Q21 core NP was THB128m (+15% q-q, +62% y-y), excluding a pre-tax THB228m inventory gain and a THB444m provision.
- We think NP outlook in 2022 will improve given the absence of a provision but core operations could weaken due to lower demand.
- Maintain BUY and our TP of THB13.5.

TARGET PRICE	THB13.50
CLOSE	THB13.60
UP/DOWNSIDE	-0.7%
TP vs CONSENSUS	+7.9%

THB444m provision expense turned 4Q21 into a net loss

GGC's 4Q21 core net profit (NP) was THB128m, up 15% q-q and 62% y-y, with a pre-tax THB228m inventory gain. However, a THB444m provision for contingent lawsuit liabilities saw GGC post a 4Q21 net loss of THB88m, missing our forecast of THB150m NP and BBG consensus' NP of THB250m. GGC's EBITDA margin rose to 9.7% in 4Q21, up from 9.2% in 3Q21, due to a higher methyl ester (ME) margin. Its 4Q21 EBITDA of THB596m came from: 1) THB324m EBITDA from ME, up 94% q-q, with a THB101m inventory gain; and 2) fatty alcohol (FA) EBITDA of THB272m, down 7% q-q, with a THB127m inventory gain.

ME improved while FA deteriorated

The 4Q21 sales volume for ME rose to 80.6kt, or 93m litres, up 7% q-q but down 14% y-y, due to the y-y weak demand from the Covid impact. The 4Q21 sales volume for FA plunged 15% q-q to 21.7kt, due to the lower demand for detergents. The crude palm oil (CPO) price jumped 24% q-q to THB45/kg in 4Q21, while the benchmark ME price rose 20% q-q to THB54/kg, or THB47/litre, due to the lower CPO inventory. The ME-CPO margin remained stable q-q at THB3.1/kg. The FA market price-to-feedstock (P2F) decreased to USD247/t, down 22% q-q and 4% y-y due to the high feedstock cost of crude palm kernel oil (CPKO) at USD1,684/t (+40% q-q, +64% y-y) vs the average FA price of USD2,301/t (+29% q-q, +55% y-y), mainly due to the weak price of mid-cut FA.

Core operations could remain weak in 1H22

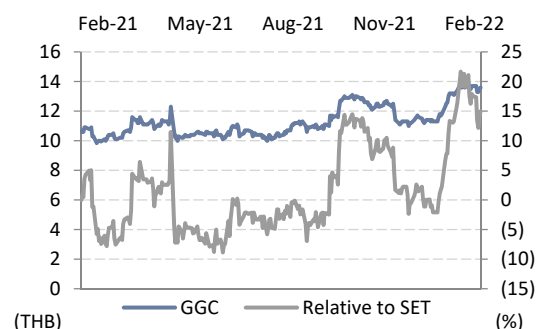
We think GGC's net profit outlook in 2022 should improve given the absence of a provision, but core operations could weaken due to lower demand for ME in Thailand as the government changes the biodiesel formula from B10 to B5. GGC's new ethanol plant should realise quarterly net losses in 1H22 before reaching profitability in 2H22 when sugarcane feedstock production rises on seasonality, based on our estimates.

Buy the dip ahead of 2H22E earnings recovery

We maintain BUY and our TP of THB13.5, based on 10.4x 2022E EV/EBITDA. We think GGC should see improving margins for both ME and FA in 2022, driven by lower feedstock costs and higher demand for FA exports and domestic ME.

KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	20,923	21,133	22,278	25,128
Net profit	330	576	802	937
EPS (THB)	0.32	0.56	0.78	0.92
vs Consensus (%)	-	(10.5)	(4.3)	-
EBITDA	1,907	1,210	1,135	1,302
Core net profit	774	576	802	937
Core EPS (THB)	0.76	0.56	0.78	0.92
Chg. In EPS est. (%)	nm	(1.8)	(7.9)	nm
EPS growth (%)	69.0	(25.7)	39.4	16.8
Core P/E (x)	18.0	24.2	17.4	14.9
Dividend yield (%)	1.5	2.2	3.7	3.7
EV/EBITDA (x)	6.9	10.5	10.4	8.5
Price/book (x)	1.4	1.3	1.3	1.2
Net debt/Equity (%)	(7.5)	(11.6)	(19.1)	(25.3)
ROE (%)	7.8	5.7	7.6	8.5



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	8.8	10.6	28.3
Relative to country (%)	6.7	6.2	13.9
Mkt cap (USD m)	426		
3m avg. daily turnover (USD m)	0.3		
Free float (%)	28		
Major shareholder	PTT Global Chemical Plc. (72%)		
12m high/low (THB)	14.10/9.60		
Issued shares (m)	1,023.67		

Sources: Bloomberg consensus; FSSIA estimates



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Exhibit 1: Summary of 4Q21/2021 operations

	4Q20	3Q21	----- 4Q21 -----			2020	2021	Change
	(THB m)	(THB m)	(THB m)	(q-q %)	(y-y %)	(THB m)	(THB m)	(y-y %)
Revenue	5,196	4,986	6,162	23.6	18.6	18,203	20,923	14.9
Operating costs	(4,437)	(4,527)	(5,566)	22.9	25.4	(17,005)	(19,017)	11.8
EBITDA	759	459	596	29.8	(21.5)	1,198	1,907	59.2
EBITDA margin (%)	14.6	9.2	9.7	nm	nm	6.6	9.1	nm
Depn & amort.	(177)	(180)	(188)	4.4	6.4	(683)	(712)	4.2
EBIT	582	279	408	46.2	(29.9)	514	1,195	132.3
Interest expense	(13)	(11)	(11)	-	(19.2)	(41)	(38)	(8.1)
Interest & invt inc	(17)	(1)	9	nm	nm	(63)	(378)	501.3
Associates' contrib	3	13	(424)	nm	nm	62	86	38.4
Pretax profit	556	281	(17)	nm	nm	575	421	(26.7)
Tax	9	(37)	(71)	91.2	nm	(15)	(91)	514.0
Tax rate (%)	(2)	13	(431)	nm	nm	3	22	nm
Minority interests	0	0	0	nm	nm	0	0	nm
Net profit	565	244	(88)	nm	nm	560	330	(41.0)
Stock Gain/(Loss) & NRV	486	132	(216)	nm	nm	102	(444)	nm
Core net profit	79	112	128	14.6	61.7	458	774	69.0
EPS (THB)	0.55	0.24	(0.09)	nm	nm	0.55	0.32	(41.0)
Core EPS (THB)	0.08	0.11	0.12	14.6	61.7	0.45	0.76	69.0

Sources: GGC; FSSIA estimates

Exhibit 2: 4Q21/2021 key quarterly indicators

Operating performance by business	Unit	4Q20	3Q21	4Q21	----- Change ----		2020	2021	Change
					(q-q %)	(y-y %)			(y-y %)
Methyl Ester (ME)									
Utilisation*	%	70.0	62.0	63.0	1	(7)	78.0	64.0	(14)
Sales volume	tonne	93,474	75,228	80,642	7	(14)	400,715	323,462	(19)
Sales volume	m litre	108	87	93	7	(14)	463	374	(19)
EBITDA	THB m	636	167	324	94	(49)	1,006	739	(27)
EBITDA margin*	%	15.6	5.0	7.3	2	(8)	7.0	4.8	(2)
Stock gain/(loss) & NRV	THB m	401	49	101	106	(75)	34	90	165
Adjusted EBITDA	THB m	235	118	223	89	(5)	972	649	(33)
Adjusted EBITDA margin*	%	5.8	3.5	5.0	2	(1)	6.8	4.2	(3)
Fatty Alcohol (FA)									
Utilisation*	%	112.0	112.0	73.0	(39)	(39)	100.0	81.0	(19)
Sales volume	tonne	26,306	25,644	21,744	(15)	(17)	95,415	86,213	(10)
EBITDA	THB m	123	292	272	(7)	121	222	785	254
EBITDA margin*	%	11.0	18.0	16.0	(2)	5	5.7	14.0	8
Stock gain/(loss) & NRV	THB m	85	83	127	53	49	102	313	207
Adjusted EBITDA	THB m	38	209	145	(31)	282	120	472	293
Adjusted EBITDA margin*	%	3.4	12.8	8.5	(4)	5	3.1	8.4	5
Product and feedstock prices									
Methyl Ester (ME) - biodiesel									
Methyl Ester (B100)	THB/litre	38.1	38.9	46.8	20	23	31.8	41.0	29
Methyl Ester (B100)	THB/kg	44.1	45.0	54.1	20	23	36.8	47.4	29
Crude Palm Oil (CPO)	THB/kg	35.6	36.0	44.6	24	25	28.1	38.0	35
EPPO P2F	THB/kg	4.31	3.11	3.11	0	(28)	4.33	3.11	(28)
Biodiesel mandate		B10	B10	B6 in Oct, B7/B10 in Nov, B7 in Dec	nm	nm	B10	B7/B10/B20 in Jan-Sep, B6 in Oct, B7/B10 in Nov, B7 in Dec	nm
Fatty Alcohol (FA)									
- Short chain	USD/tonne	2,003	2,462	2,998	22	50	1,990	2,434	22
- Mid cut	USD/tonne	1,547	1,825	2,278	25	47	1,253	2,021	61
- Long chain	USD/tonne	1,222	1,532	2,184	43	79	1,155	1,631	41
Average Fatty Alcohol price	USD/tonne	1,486	1,784	2,301	29	55	1,282	1,937	51
Crude Palm Kernel Oil (CPKO)	USD/tonne	1,025	1,204	1,684	40	64	795	1,362	71
Market P2F of Fatty Alcohols	USD/tonne	256	315	247	(22)	(4)	329	275	(16)

*Note: Change in margin % is represented in ppt change

Sources: GGC; FSSIA estimates

Financial Statements

Global Green Chemicals

Profit and Loss (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Revenue	18,203	20,923	21,133	22,278	25,128
Cost of goods sold	(16,177)	(18,223)	(19,204)	(20,029)	(22,369)
Gross profit	2,026	2,701	1,929	2,249	2,760
Other operating income	-	-	-	-	-
Operating costs	(828)	(794)	(719)	(1,114)	(1,457)
Operating EBITDA	1,198	1,907	1,210	1,135	1,302
Depreciation	(683)	(712)	(715)	(582)	(598)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	514	1,195	495	553	704
Net financing costs	(41)	(38)	30	75	124
Associates	62	86	50	100	100
Recurring non-operating income	0	(292)	70	200	140
Non-recurring items	102	(444)	0	0	0
Profit before tax	575	421	595	828	968
Tax	(15)	(91)	(19)	(26)	(31)
Profit after tax	560	330	576	802	937
Minority interests	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	560	330	576	802	937
Non-recurring items & goodwill (net)	(102)	444	0	0	0
Recurring net profit	458	774	576	802	937
Per share (THB)					
Recurring EPS *	0.45	0.76	0.56	0.78	0.92
Reported EPS	0.55	0.32	0.56	0.78	0.92
DPS	0.35	0.20	0.30	0.50	0.50
Diluted shares (used to calculate per share data)	1,024	1,024	1,024	1,024	1,024
Growth					
Revenue (%)	39.4	14.9	1.0	5.4	12.8
Operating EBITDA (%)	176.8	59.2	(36.5)	(6.2)	14.7
Operating EBIT (%)	nm	132.3	(58.6)	11.7	27.3
Recurring EPS (%)	167.9	69.0	(25.7)	39.4	16.8
Reported EPS (%)	495.8	(41.0)	74.3	39.4	16.8
Operating performance					
Gross margin inc. depreciation (%)	7.4	9.5	5.7	7.5	8.6
Gross margin of key business (%)	7.4	7.4	5.7	7.5	8.6
Operating EBITDA margin (%)	6.6	9.1	5.7	5.1	5.2
Operating EBIT margin (%)	2.8	5.7	2.3	2.5	2.8
Net margin (%)	2.5	3.7	2.7	3.6	3.7
Effective tax rate (%)	2.9	27.2	3.5	3.5	3.5
Dividend payout on recurring profit (%)	78.2	26.4	53.4	63.8	54.6
Interest cover (X)	12.6	24.0	(19.0)	(10.1)	(6.8)
Inventory days	40.6	40.3	39.0	38.8	37.5
Debtor days	30.7	35.1	44.8	45.9	40.7
Creditor days	22.9	23.1	23.6	23.5	22.7
Operating ROIC (%)	6.2	(3.6)	(1.6)	(1.8)	(2.5)
ROIC (%)	4.5	(1.8)	(1.2)	(1.6)	(1.9)
ROE (%)	4.7	7.8	5.7	7.6	8.5
ROA (%)	3.8	5.7	4.2	5.6	6.3
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
	2020	2021	2022E	2023E	2024E
Methyl Ester	11,687	14,846	14,880	15,894	18,538
Fatty Alcohols	6,515	6,077	6,252	6,384	6,590

Sources: Global Green Chemicals; FSSIA estimates

Financial Statements

Global Green Chemicals

Cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Recurring net profit	458	774	576	802	937
Depreciation	683	712	715	582	598
Associates & minorities	-	-	-	-	-
Other non-cash items	-	-	-	-	-
Change in working capital	(1,066)	208	(442)	(18)	(56)
Cash flow from operations	75	1,694	849	1,367	1,479
Capex - maintenance	(472)	(472)	(715)	(582)	(598)
Capex - new investment	-	-	-	-	-
Net acquisitions & disposals	-	-	-	-	-
Other investments (net)	1,213	1,162	1,754	1,626	1,749
Cash flow from investing	741	690	1,039	1,044	1,151
Dividends paid	(717)	(921)	(205)	(307)	(512)
Equity finance	0	0	0	0	0
Debt finance	(446)	(566)	375	55	55
Other financing cash flows	(1,223)	(1,129)	(1,230)	(1,235)	(1,342)
Cash flow from financing	(2,385)	(2,616)	(1,060)	(1,487)	(1,799)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	(1,569)	(231)	828	923	831
Free cash flow to firm (FCFF)	885.15	2,433.97	1,918.21	2,429.27	2,636.69
Free cash flow to equity (FCFE)	(851.97)	689.99	1,032.51	1,230.57	1,342.99

Per share (THB)

FCFF per share	0.86	2.38	1.87	2.37	2.58
FCFE per share	(0.83)	0.67	1.01	1.20	1.31
Recurring cash flow per share	1.12	1.45	1.26	1.35	1.50

Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	10,395	10,078	10,269	10,461	10,652
Less: Accumulated depreciation	(5,819)	(5,819)	(6,534)	(7,117)	(7,715)
Tangible fixed assets (net)	4,576	4,259	3,735	3,344	2,937
Intangible fixed assets (net)	69	67	67	67	67
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	1,623	1,881	1,881	1,881	1,881
Cash & equivalents	1,742	1,511	2,338	3,262	4,093
A/C receivable	1,637	2,381	2,804	2,804	2,804
Inventories	2,003	2,024	2,082	2,172	2,425
Other current assets	-	-	-	-	-
Current assets	5,382	5,917	7,225	8,237	9,322
Other assets	1,589	1,394	1,401	1,441	1,540
Total assets	13,239	13,517	14,308	14,970	15,747
Common equity	9,993	9,970	10,341	10,836	11,261
Minorities etc.	0	0	0	0	0
Total shareholders' equity	9,993	9,970	10,341	10,836	11,261
Long term debt	764	0	375	430	485
Other long-term liabilities	596	503	503	503	503
Long-term liabilities	1,360	503	878	933	988
A/C payable	1,076	1,226	1,262	1,316	1,470
Short term debt	566	764	764	764	764
Other current liabilities	244	1,053	1,064	1,121	1,265
Current liabilities	1,886	3,044	3,089	3,201	3,498
Total liabilities and shareholders' equity	13,239	13,517	14,308	14,970	15,747
Net working capital	2,319	2,126	2,561	2,538	2,495
Invested capital	10,176	9,726	9,644	9,271	8,920

* Includes convertibles and preferred stock which is being treated as debt

Per share (THB)

Book value per share	9.76	9.74	10.10	10.59	11.00
Tangible book value per share	9.69	9.67	10.04	10.52	10.94

Financial strength

Net debt/equity (%)	(4.1)	(7.5)	(11.6)	(19.1)	(25.3)
Net debt/total assets (%)	(3.1)	(5.5)	(8.4)	(13.8)	(18.1)
Current ratio (x)	2.9	1.9	2.3	2.6	2.7
CF interest cover (x)	(19.8)	19.3	(33.7)	(15.4)	(9.9)

Valuation	2020	2021	2022E	2023E	2024E
Recurring P/E (x) *	30.4	18.0	24.2	17.4	14.9
Recurring P/E @ target price (x) *	30.2	17.8	24.0	17.2	14.7
Reported P/E (x)	24.9	42.2	24.2	17.4	14.9
Dividend yield (%)	2.6	1.5	2.2	3.7	3.7
Price/book (x)	1.4	1.4	1.3	1.3	1.2
Price/tangible book (x)	1.4	1.4	1.4	1.3	1.2
EV/EBITDA (x) **	11.3	6.9	10.5	10.4	8.5
EV/EBITDA @ target price (x) **	11.2	6.9	10.4	10.4	8.4
EV/invested capital (x)	1.3	1.4	1.3	1.3	1.2

* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income

Sources: Global Green Chemicals; FSSIA estimates

Corporate Governance report of Thai listed companies 2020

EXCELLENT LEVEL										
AAV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AOT	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
BEC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
DV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	OTO	PAP	PCSGH	PDJ	PG	PHOL	PLANB	PLANET
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
THIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TTB	TMILL	TNDT
TNL	TOA	TOP	TPBI	TQM	TRC	TRC	TSC	TSR	TSTE	TSTH
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		

VERY GOOD LEVEL										
2S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAHA	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	B	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
ESTAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
IMH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
L&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	MITSIB	MK	MODERN	MTI	MVP
NETBAY	NEX	NINE	NTV	NWR	OCC	OGC	OSP	PATO	PB	PDG
PDI	PICO	PIMO	PJW	PL	PM	PPP	PRIN	PRINC	PSTC	PT
QLT	RCL	RICHY	RML	RPC	RWI	S11	SALEE	SAMCO	SANKO	SAPPE
SAWAD	SCI	SCP	SE	SEG	SFP	SGF	SHR	SIAM	SINGER	SKE
SKR	SKY	SMIT	SMT	SNP	SPA	SPC	SPCG	SR	SRICHA	SSC
SSF	STANLY	STI	STPI	SUC	SUN	SYNEX	T	TAE	TAKUNI	TBSP
TCC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
TMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
TPS	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
UPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIJK	WP	XO
YUASA	ZEN	ZIGA	ZMICO							

GOOD LEVEL										
7UP	A	ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
B52	BC	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
CPT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
GSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
KCM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
MDX	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
OCEAN	PAF	PF	PK	PLE	PMTA	POST	PPM	PRAKIT	PRECHA	PRIME
PROUD	PTL	RBF	RCI	RJH	ROJNA	RP	RPH	RSP	SF	SFLEX
SGP	SISB	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP	STARK	STC
SUPER	SVOA	TC	TCCC	THMUI	TIW	TNH	TOPP	TPCH	TIPIP	TPLAS
TTI	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH		

Description

Score Range

Excellent

90-100

Very Good

80-89

Good

70-79

Disclaimer:

The disclosure of the survey results of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey results may be changed after that date. FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such survey results.

* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive; ** delisted

Source: Thai Institute of Directors Association (IOD); FSSIA's compilation

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAHA	AP	AQUA	ARROW
ASK	ASP	AYUD	B	BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG
BGC	BGRIM	BJCHI	BKI	BLA	BPP	BROOK	BRR	BSBM	BTS	BWG
CEN	CENTEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT	CM	CMC
COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS
FTE	GBX	GC	GCAP	GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL
HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS	INET	INSURE	INTUCH	IRPC
ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL
KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO
MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG
MPG	MSC	MTC	MTI	NBC	NEP	NINE	NKI	NMG	NNCL	NSI
NWR	OCC	OCEAN	OGC	ORI	PAP	PATO	PB	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J
SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC
TAE	TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM
THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT	TTB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO
ZEN	TRUE									

DECLARED										
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
BM	BROCK	BUI	CHO	CI	COTTO	DDD	EA	EFORL	EP	ERW
ESTAR	ETE	EVER	FSMART	GPI	ILINK	IRC	J	JKN	JMART	JMT
JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK	PK	PLE
ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY
SUPER	SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA

Level	
Certified	This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already passed examination to ensure independence from external parties.
Declared	This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

Disclaimer:

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, FSS International Investment Advisory Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment results.

Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of June 24, 2019) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Source: The Securities and Exchange Commission, Thailand; * FSSIA's compilation

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Suwat Sinsadok, CFA, FRM, ERP FSS International Investment Advisory Securities Co., Ltd

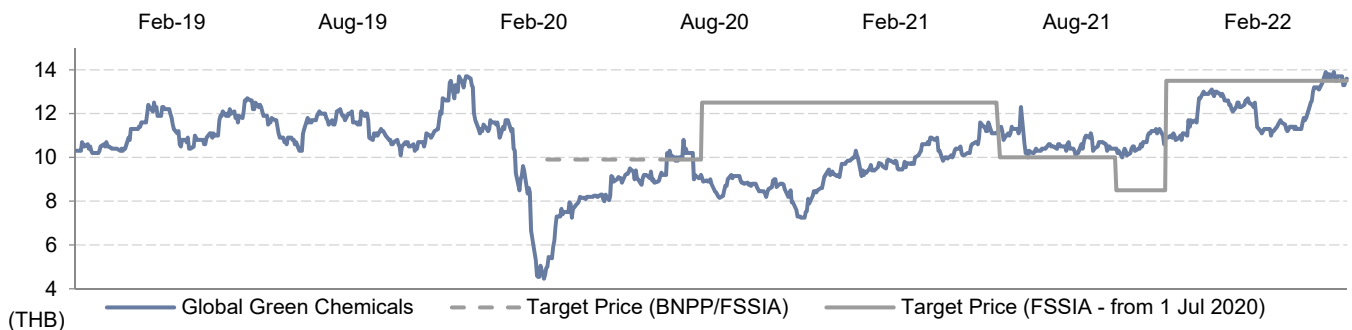
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History of change in investment rating and/or target price

Global Green Chemicals (GGC TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
26-Mar-2020	BUY	9.90	16-Apr-2021	REDUCE	10.00	08-Sep-2021	BUY	13.50
05-Aug-2020	BUY	12.50	27-Jul-2021	REDUCE	8.50			

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 11-Jun-2020

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Global Green Chemicals	GGC TB	THB 13.60	BUY	Downside risks to our EV/EBITDA-based target price include: 1) a sharp decline in crude palm oil price; 2) a change in government policy for biodiesel from the current B7; and 3) a narrower fatty alcohol margin due to the new supply in the US

Source: FSSIA estimates

Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finasia Syrus Securities Public Company Limited

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All share prices are as at market close on 11-Feb-2022 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as $(\text{target price}^* - \text{current price}) / \text{current price}$.

BUY (B). The upside is 10% or more.

HOLD (H). The upside or downside is less than 10%.

REDUCE (R). The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

Industry Recommendations

Overweight. The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

Neutral. The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

Underweight. The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

Country (Strategy) Recommendations

Overweight (O). Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Neutral (N). Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Underweight (U). Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.