

PTT GLOBAL CHEMICAL

PTTGC TB

THAILAND / PETROCHEM & CHEMICALS

REDUCE

FROM HOLD

TARGET PRICE	THB40.00
CLOSE	THB48.00
UP/DOWNSIDE	-16.7%
PRIOR TP	THB56.00
CHANGE IN TP	-28.6%
TP vs CONSENSUS	-35.2%

Hurt by plunging chemical margins

- 1Q22 net profit (NP) was THB4.2b, up 30% q-q but down 57% y-y. Core NP was THB6.2b, up 80% q-q but down 29% y-y.
- Key culprits: poor earnings from aromatics and performance material chemical units, thin olefins margins, and a hedging loss.
- Downgrade to REDUCE from Hold and cut our TP to THB40.

Hedging loss worsened 1Q22 operating earnings

1Q22 net profit (NP) was THB4.2b, up 30% q-q but down 57% y-y. Core NP was THB6.2b, up 80% q-q but down 29% y-y, missing the BBG consensus estimate by 21% and our estimate by 5% due to poor earnings from aromatics and the performance material chemical (PC; phenol, propylene oxide, and polyols) units, weaker olefins product margins and a large hedging loss of USD16.6/bbl, which was partly offset by the higher gross refining margin (GRM). The overall EBITDA margin in 1Q22 was at 6% (vs 9% in 4Q21 and 16% in 1Q21). Non-operating items included a stock gain of THB4.9b, a financial hedging gain of THB1.0b, a loss from commodity hedging of THB8.6b, and an FX gain of THB595m.

Refinery weakness was a major disappointment in 1Q22

The refinery unit had a 1Q22 net loss of THB2.8b due to the hedging loss of USD16.6/bbl, while its EBITDA margin excluding hedging loss rose to 5% from 4% in 4Q21 due to the market GRM of USD7.6/bbl (+140% y-y, +20% q-q) and a stock gain of USD4.5/bbl. The refinery utilisation rate stayed at 101% in 1Q22, flat q-q. For aromatics, the 1Q22 net profit was THB431m, boosted by the accounting P2F at USD179/t (-10% y-y, +39% q-q) due to a higher PX-condensate margin of USD251/t (-1% y-y, +20% q-q), and a lower benzene-condensate margin of USD238/t (-1% y-y, -9% q-q). The aromatics utilisation rate rose to 100% in 1Q22.

Weak olefins earnings continued in 1Q22

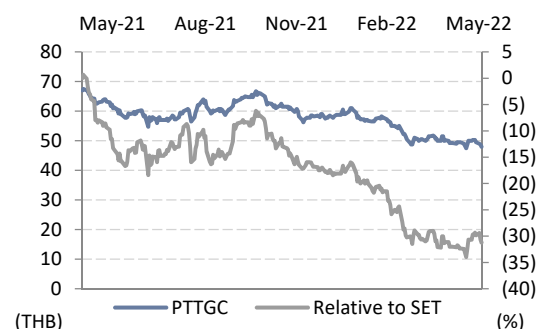
1Q22 olefins net profit was weak at THB1.9b due to lower product margins over naphtha for downstream polymers, resulting in a lower olefins EBITDA margin at 11%, down from 12% in 4Q21 and 26% in 1Q21. As the naphtha feedstock cost rose sharply, PTTGC ran its olefins utilisation rate at 85% in 1Q22 vs 104% in 1Q21, with polymers at 106%. 1Q22 NP for PC dragged the share of profits to THB1,142m (-40% y-y, -22% q-q) due to the weaker margins of BPA, polyols, and propylene oxide that were partly offset by the strong margin of phenol.

Still too early for investment

We downgrade to REDUCE from Hold and cut our TP to THB40, based on 6.8x 2022E EV/EBITDA, below its eight-year average of 7.9x, to reflect the weak margins for olefins, aromatics, and PC products.

KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	468,953	497,682	470,425	471,550
Net profit	44,982	30,528	29,557	27,971
EPS (THB)	9.98	6.77	6.56	6.20
vs Consensus (%)	-	27.3	11.2	(5.2)
EBITDA	62,186	56,461	57,747	58,704
Core net profit	31,347	29,027	28,054	28,457
Core EPS (THB)	6.95	6.44	6.22	6.31
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	326.2	(7.4)	(3.4)	1.4
Core P/E (x)	6.9	7.5	7.7	7.6
Dividend yield (%)	7.8	6.8	6.6	6.2
EV/EBITDA (x)	6.5	7.5	7.3	7.2
Price/book (x)	0.7	0.7	0.7	0.7
Net debt/Equity (%)	53.7	62.1	63.9	66.2
ROE (%)	10.5	9.1	8.9	9.3



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(4.0)	(16.9)	(29.9)
Relative to country (%)	(0.1)	(12.5)	(31.4)
Mkt cap (USD m)	6,251		
3m avg. daily turnover (USD m)	30.7		
Free float (%)	51		
Major shareholder	PTT Plc. (48%)		
12m high/low (THB)	68.75/47.25		
Issued shares (m)	4,508.85		

Sources: Bloomberg consensus; FSSIA estimates



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Investment thesis

With our projected weaker earnings starting in 2022 as a result of its weaker feedstock competitiveness after the start-up of its 0.75mtpa Olefins Reconfiguration Project (ORP) in 2H21, we think PTTGC's net profit and valuation are likely to weaken in 2022-24. The earnings from its high-volume specialty products should help partly offset the weaker earnings from its core olefins and aromatics units caused by the industry oversupply.

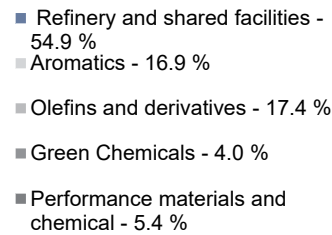
PTTGC is less attractive as a beneficiary of the strong projected GRM rise due to the lower GRM elasticity for its condensate residual splitter units, which should be more than offset by the weaker margins of PE, PP, PX, and benzene. The rising oil price would negatively impact PTTGC's olefins earnings as PTTGC now acquires over 60% of its feedstocks from naphtha vs only 40% from ethane.

Company profile

PTTGC was a merger between two previously listed petrochemical companies - PTTCH and PTTAR. PTTGC was listed on 21 October 2011. PTTCH and PTTAR shares were delisted on 11 October 2011 and their shareholders became shareholders of PTTGC based on an agreed swap ratio.

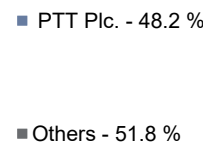
www.pttgcgroup.com

Principal activities (revenue, 2021)



Source: PTT Global Chemical

Major shareholders



Source: PTT Global Chemical

Catalysts

Potential key drivers are a weaker HDPE-naphtha margin and the continued weak margins of aromatics products.

Risks to our call

The key upside risks to our EV/EBITDA-based TP are a stronger-than-expected HDPE price and HDPE-naphtha margin.

Event calendar

Date	Event
Aug 2022	2Q22 results announcement

Key assumptions

	2022E	2023E	2024E
Dubai oil price (USD/bbl)	100.0	90.0	90.0
Olefin utilisation rate (%)	95.0	96.0	97.0
Refinery utilisation rate (%)	90.0	90.0	90.0
HDPE-naphtha (USD/t)	450	590	640
HDPE price (USD/t)	1,450	1,400	1,450
LDPE-naphtha (USD/t)	650	790	840
LDPE price (USD/t)	1,650	1,600	1,650
LLDPE-naphtha (USD/t)	500	640	690
LLDPE price (USD/t)	1,500	1,450	1,500
MEG-naphtha (USD/t)	300	690	690
MEG price (USD/t)	1,300	1,500	1,500
Market GRM (USD/bbl)	9.2	9.5	8.7
Gasoline-Dubai (USD/bbl)	20	18	16
Jet-Dubai (USD/bbl)	23	22	20
Diesel-Dubai (USD/bbl)	24	22	20

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in average Dubai oil price, we project 2022 earnings to rise by 1.2%, and vice versa.
- For every 1% increase in market GRM, we estimate 2022 earnings will rise by 0.5%, and vice versa.
- For every 1% increase in HDPE price, we estimate 2022 earnings will rise by 1.8%, and vice versa.

Source: FSSIA estimates

Exhibit 1: Summary of 1Q22 operations

	1Q21	4Q21	----- 1Q22 -----			2021	2022E	Chg.
	(THB m)	(THB m)	(THB m)	(q-q %)	(y-y %)	(THB m)	(THB m)	(y-y %)
Revenue	102,676	140,461	176,767	25.8	72.2	468,953	497,682	6.1
Operating costs	(86,272)	(127,786)	(166,179)	30.0	92.6	(385,039)	(417,564)	8.4
EBITDA	16,404	12,675	10,588	(16.5)	(35.5)	62,186	56,461	(9.2)
EBITDA margin (%)	16.0	9.0	6.0	nm	nm	13.3	11.3	nm
Depn & amort.	(5,458)	(5,854)	(6,837)	16.8	25.3	(24,744)	(26,991)	9.1
EBIT	10,801	4,071	11,920	nm	10.4	37,443	29,470	(21.3)
Interest expense	(1,184)	(1,528)	(2,101)	37.5	77.5	(5,945)	(6,322)	6.3
Interest & invt inc	408	(11,403)	811	(107.1)	98.8	11,229	1,572	(86.0)
Associates' contrib	1,893	1,471	1,142	(22.3)	(39.6)	6,841	6,753	(1.3)
Exceptionals	(1,370)	10,888	(6,908)	(163.4)	nm	(10,424)	2,359	nm
Pretax profit	10,548	3,499	4,865	39.0	(53.9)	52,778	35,333	(33.1)
Tax	(721)	(190)	(184)	(3.6)	(74.5)	(7,228)	(4,434)	(38.7)
Tax rate (%)	6.8	5.4	3.8	(30.7)	(44.8)	13.7	12.5	(8.4)
Minority interests	(132)	(61)	(470)	675.1	255.1	(568)	(371)	nm
Net profit	9,695	3,248	4,212	29.7	(56.6)	44,982	30,528	(32.1)
Non-recurring items	926	(214)	(2,024)	845.4	(318.6)	13,635	1,501	(89.0)
Core net profit	8,769	3,462	6,236	80.1	(28.9)	31,347	29,027	(7.4)
EPS (THB)	2.15	0.72	0.93	29.7	(56.6)	9.98	6.77	(32.1)
Core EPS (THB)	1.94	0.77	1.38	80.1	(28.9)	6.95	6.44	(7.4)

Sources: PTTGC; FSSIA estimates

Exhibit 2: 1Q22 key quarterly indicators

	1Q21	4Q21	1Q22	----- Change -----	
				(q-q)	(y-y)
Utilisation rate (%)*					
Olefins	104	80	85	5.0	(19.0)
Polymer	105	98	106	8.0	1.0
MEG	105	99	106	7.0	1.0
Refinery	102	101	101	-	(1.0)
Aromatics	98	97	100	3.0	2.0
Phenol	119	101	119	18.0	-
BPA	113	107	119	12.0	6.0
PO	89	89	104	15.0	15.0
Margins	1Q21	4Q21	1Q22	(q-q%)	(y-y%)
Refinery (USD/bbl)					
Market GRM	3.17	6.35	7.60	19.7	139.7
Hedging gain (loss)	(0.25)	1.81	(16.61)	(1,017.7)	6,544.0
Stock gain (loss)	2.48	1.66	4.53	172.9	82.7
Accounting GRM	5.40	9.82	(4.48)	(145.6)	(183.0)
Aromatics (USD/t)					
Market P2F	142.0	101.0	48.0	(52.5)	(66.2)
Hedging gain (loss)	(6.3)	12.1	2.6	(78.5)	(141.3)
Stock gain (loss)	62.5	16.0	129.0	706.3	106.4
Accounting P2F	198.0	129.0	179.0	38.8	(9.6)
Olefins (USD/t)					
HDPE price	1,145	1,252	1,330	6.2	16.2
Naphtha	557	745	877	17.7	57.5
HDPE-naphtha	588	507	453	(10.7)	(23.0)
Net profit breakdown by product group (THB m)	1Q21	4Q21	1Q22	(q-q %)	(y-y %)
Olefins & derivatives	4,893	(1,634)	1,860	(213.8)	(62.0)
Refinery	1,248	2,405	(2,754)	(214.5)	(320.7)
Aromatics	1,066	(857)	431	(150.3)	(59.6)
EO/EG, JV	(826)	8,955	(39)	(100.4)	(95.3)
Green chemical	131	2,955	358	(87.9)	173.3
High volume specialties	2,702	2,224	1,238	(44.3)	(54.2)
Services & others	481	(10,801)	3,118	(128.9)	548.2
Total net profit	9,695	3,247	4,212	29.7	(56.6)
EBITDA margin (%)*	1Q21	4Q21	1Q22	(q-q)	(y-y)
Overall	16	9	6	(3.0)	(10.0)
Overall excluding stock gain/loss	14	7	8	1.0	(6.0)
Olefins & derivatives	26	12	11	(1.0)	(15.0)
Refinery	2	4	5	1.0	3.0
Aromatics	7	2	(6)	(8.0)	(13.0)
Green	7	11	11	-	4.0
HVS	28	22	15	(7.0)	(13.0)

*Note: Change in % is represented in ppt change

Sources: PTTGC; FSSIA estimates

Financial Statements

PTT Global Chemical

Profit and Loss (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Revenue	329,291	468,953	497,682	470,425	471,550
Cost of goods sold	(294,596)	(385,039)	(417,564)	(390,386)	(390,344)
Gross profit	34,695	83,914	80,118	80,039	81,206
Other operating income	-	-	-	-	-
Operating costs	(14,881)	(21,727)	(23,657)	(22,292)	(22,502)
Operating EBITDA	19,813	62,186	56,461	57,747	58,704
Depreciation	(22,497)	(24,744)	(26,991)	(29,238)	(31,484)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	(2,683)	37,443	29,470	28,510	27,220
Net financing costs	(3,861)	5,021	(4,750)	(4,583)	(3,028)
Associates	3,323	6,841	6,753	6,489	6,489
Recurring non-operating income	14,243	(3,320)	9,112	8,848	8,848
Non-recurring items	(7,156)	13,635	1,501	1,503	(486)
Profit before tax	543	52,778	35,333	34,277	32,553
Tax	109	(7,228)	(4,434)	(4,349)	(4,211)
Profit after tax	652	45,550	30,899	29,928	28,342
Minority interests	(452)	(568)	(371)	(371)	(371)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	200	44,982	30,528	29,557	27,971
Non-recurring items & goodwill (net)	7,156	(13,635)	(1,501)	(1,503)	486
Recurring net profit	7,356	31,347	29,027	28,054	28,457
Per share (THB)					
Recurring EPS *	1.63	6.95	6.44	6.22	6.31
Reported EPS	0.04	9.98	6.77	6.56	6.20
DPS	0.02	3.75	3.25	3.15	2.98
Diluted shares (used to calculate per share data)	4,508	4,508	4,508	4,508	4,508
Growth					
Revenue (%)	(20.2)	42.4	6.1	(5.5)	0.2
Operating EBITDA (%)	(23.7)	213.9	(9.2)	2.3	1.7
Operating EBIT (%)	nm	nm	(21.3)	(3.3)	(4.5)
Recurring EPS (%)	(25.8)	326.2	(7.4)	(3.4)	1.4
Reported EPS (%)	(98.3)	22,435.5	(32.1)	(3.2)	(5.4)
Operating performance					
Gross margin inc. depreciation (%)	3.7	12.6	10.7	10.8	10.5
Gross margin of key business (%)	3.7	12.6	10.7	10.8	10.5
Operating EBITDA margin (%)	6.0	13.3	11.3	12.3	12.4
Operating EBIT margin (%)	(0.8)	8.0	5.9	6.1	5.8
Net margin (%)	2.2	6.7	5.8	6.0	6.0
Effective tax rate (%)	(20.1)	13.7	12.5	12.7	12.9
Dividend payout on recurring profit (%)	1.3	53.9	50.5	50.6	47.2
Interest cover (X)	3.0	(6.8)	8.1	8.2	11.9
Inventory days	43.2	48.9	47.0	34.4	33.4
Debtor days	35.2	31.1	34.6	33.0	32.1
Creditor days	44.7	36.8	41.0	44.0	42.8
Operating ROIC (%)	(0.9)	(1.5)	(1.3)	(1.3)	(1.2)
ROIC (%)	2.7	(0.8)	(0.8)	(0.8)	(0.7)
ROE (%)	2.6	10.5	9.1	8.9	9.3
ROA (%)	2.4	5.2	4.0	4.0	4.2
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Refinery and shared facilities	136,654	257,369	284,711	257,455	258,580
Aromatics	59,125	79,125	79,125	79,125	79,125
Olefins and derivatives	90,258	81,475	82,861	82,861	82,861
Green Chemicals	13,652	18,652	19,652	19,652	19,652

Sources: PTT Global Chemical; FSSIA estimates

Financial Statements

PTT Global Chemical

Cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Recurring net profit	7,356	31,347	29,027	28,054	28,457
Depreciation	22,497	24,744	26,991	29,238	31,484
Associates & minorities	(6,001)	(6,002)	(6,753)	(6,489)	(6,489)
Other non-cash items	(1,584)	13,514	13,514	13,514	13,514
Change in working capital	6,024	(8,749)	(1,545)	2,189	296
Cash flow from operations	28,291	54,854	61,233	66,506	67,262
Capex - maintenance	-	-	-	-	-
Capex - new investment	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)
Net acquisitions & disposals	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Other investments (net)	(770)	(760)	(760)	(760)	(760)
Cash flow from investing	(41,770)	(41,760)	(41,760)	(41,760)	(41,760)
Dividends paid	(19,131)	(7,889)	(30,429)	(37,193)	(36,727)
Equity finance	0	0	0	0	0
Debt finance	(8,486)	(8,484)	(1,000)	(10,000)	(10,000)
Other financing cash flows	59,849	14,579	(13,957)	11,423	9,434
Cash flow from financing	32,231	(1,794)	(45,386)	(35,770)	(37,293)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	18,752	11,301	(25,912)	(11,024)	(11,791)
Free cash flow to firm (FCFF)	(9,967.83)	19,039.33	25,795.39	30,900.86	31,352.64
Free cash flow to equity (FCFE)	37,883.83	19,189.55	4,516.65	26,169.02	24,936.50

Per share (THB)

FCFF per share	(2.21)	4.22	5.72	6.85	6.95
FCFE per share	8.40	4.26	1.00	5.80	5.53
Recurring cash flow per share	4.94	14.11	13.93	14.27	14.85

Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	420,497	460,497	500,497	540,497	580,497
Less: Accumulated depreciation	(177,243)	(201,987)	(228,977)	(258,215)	(289,699)
Tangible fixed assets (net)	243,254	258,511	271,520	282,282	290,798
Intangible fixed assets (net)	0	0	0	0	0
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	51,791	58,793	66,546	74,035	81,524
Cash & equivalents	44,313	55,613	29,701	18,676	6,885
A/C receivable	29,277	50,540	43,771	41,374	41,473
Inventories	33,445	69,725	37,774	35,705	35,790
Other current assets	22,876	31,366	21,366	21,366	21,366
Current assets	129,911	207,244	132,611	117,121	105,514
Other assets	64,426	229,567	229,567	209,567	189,567
Total assets	489,383	754,115	700,245	683,006	667,404
Common equity	281,015	318,242	318,341	310,704	301,948
Minorities etc.	7,979	9,361	4,790	5,161	5,532
Total shareholders' equity	288,994	327,603	323,131	315,866	307,480
Long term debt	126,261	224,760	223,760	213,760	203,760
Other long-term liabilities	15,086	54,746	3,556	6,231	8,905
Long-term liabilities	141,347	279,506	227,316	219,991	212,665
A/C payable	31,988	45,556	48,346	45,699	45,808
Short term debt	1,993	6,729	6,729	6,729	6,729
Other current liabilities	25,060	94,723	94,723	94,723	94,723
Current liabilities	59,041	147,007	149,798	147,150	147,259
Total liabilities and shareholders' equity	489,383	754,115	700,245	683,006	667,404
Net working capital	28,550	11,353	(40,158)	(41,976)	(41,901)
Invested capital	388,022	558,224	527,475	523,909	519,988

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

Per share (THB)

Book value per share	62.34	70.59	70.62	68.92	66.98
Tangible book value per share	62.34	70.59	70.62	68.92	66.98

Financial strength

Net debt/equity (%)	29.0	53.7	62.1	63.9	66.2
Net debt/total assets (%)	17.2	23.3	28.7	29.5	30.5
Current ratio (x)	2.2	1.4	0.9	0.8	0.7
CF interest cover (x)	21.2	(10.8)	10.4	15.4	22.4

Valuation	2020	2021	2022E	2023E	2024E
Recurring P/E (x) *	29.4	6.9	7.5	7.7	7.6
Recurring P/E @ target price (x) *	24.5	5.8	6.2	6.4	6.3
Reported P/E (x)	1,084.1	4.8	7.1	7.3	7.7
Dividend yield (%)	0.0	7.8	6.8	6.6	6.2
Price/book (x)	0.8	0.7	0.7	0.7	0.7
Price/tangible book (x)	0.8	0.7	0.7	0.7	0.7
EV/EBITDA (x) **	15.6	6.5	7.5	7.3	7.2
EV/EBITDA @ target price (x) **	13.7	5.9	6.8	6.7	6.6
EV/invested capital (x)	0.8	0.7	0.8	0.8	0.8

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

Sources: PTT Global Chemical; 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

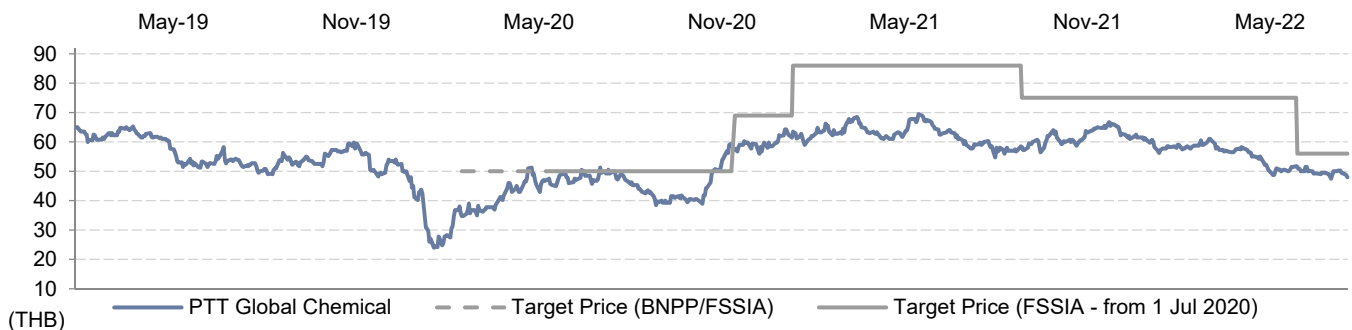
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History of change in investment rating and/or target price

PTT Global Chemical (PTTGC TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
09-Apr-2020	BUY	50.00	18-Jan-2021	BUY	86.00	28-Mar-2022	HOLD	56.00
27-Nov-2020	BUY	69.00	03-Aug-2021	BUY	75.00			

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 08-May-2020

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
PTT Global Chemical	PTTGC TB	THB 48.00	REDUCE	The key upside risks to our EV/EBITDA-based TP are a stronger-than-expected HDPE price and HDPE-naphtha margin.

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 Finansia Syrus Securities Public Company Limited

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All share prices are as at market close on 11-May-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.