

# PTT GLOBAL CHEMICAL

# PTTGC TB

THAILAND / PETROCHEM &amp; CHEMICALS

# REDUCE

## Stumbling 2Q22 on hedging loss

- 2Q22 net profit (NP) was THB1.4b, down 67% q-q and 95% y-y. Core NP was THB13.7b, up 120% q-q and 31% y-y.
- Key culprits were the weaker product margins and a large hedging loss of THB12.7b, which was partly offset by the higher GRM.
- Maintain REDUCE and our TP of THB40.

TARGET PRICE	THB40.00
CLOSE	THB46.50
UP/DOWNSIDE	-14.0%
TP vs CONSENSUS	-28.7%

### 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 (%)	-	28.9	10.7	(3.5)
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
EPS growth (%)	326.2	(7.4)	(3.4)	1.4
Core P/E (x)	6.7	7.2	7.5	7.4
Dividend yield (%)	8.1	7.0	6.8	6.4
EV/EBITDA (x)	6.3	7.4	7.2	7.1
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

### Hedging loss and weak chemical margins eroded 2Q22 results

2Q22 net profit (NP) was THB1.4b, down 67% q-q and 95% y-y. Core NP was THB13.7b, up 120% q-q and 31% y-y, missing the BBG consensus estimate by 11% and our estimate by 4% due to poor earnings from the aromatics and performance material chemical (PC; phenol, propylene oxide, and polyols) units, weaker olefins product margins and a large hedging loss of THB12.7b, which was partly offset by the higher gross refining margin (GRM). The overall EBITDA margin in 2Q22 was at 5.8% (vs 6% in 1Q22 and 14.9% in 2Q21). Non-operating items included a stock gain of THB3.1b, a financial hedging gain of THB1.7b, a loss from commodity hedging of THB12.7b, and an FX loss of THB4.4b.

### GRM strength was mostly wiped out by hedging loss

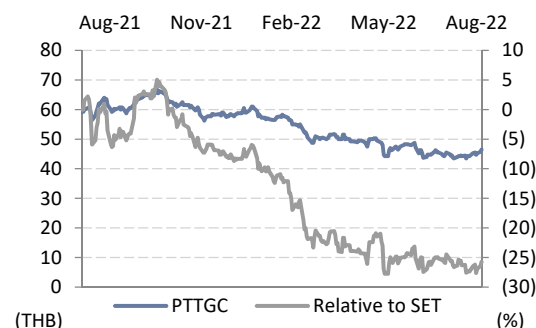
The refinery unit had a 2Q22 net profit of THB1.8b due to a hedging loss of USD20.7/bbl despite a high market GRM of USD21.1/bbl (+939% y-y, +178% q-q) and a stock gain of USD4.9/bbl, leading to an EBITDA margin of 12% in 2Q22. The refinery utilisation rate dipped to 98% in 2Q22, down from 101% in 1Q22. For aromatics, the 2Q22 net loss was THB501m, caused by the depressed accounting P2F at USD44/t (-79% y-y, -75% q-q) due to poor PX-condensate and benzene-condensate margins. The aromatics utilisation rate dropped to 80% in 2Q22, down from 100% in 1Q22.

### Olefins remained underwater

2Q22 olefins net profit was weak at THB2b due to lower product margins over naphtha for downstream polymers, resulting in a lower olefins EBITDA margin at 9%, down from 11% in 1Q22 and 26% in 2Q21. As the naphtha feedstock cost rose sharply, PTTGC ran its olefins utilisation rate at 75% in 2Q22 vs 85% in 1Q22, with polymers at 90%. 2Q22 share of profits came to THB1,549m (-33% y-y, +36% q-q) due to the poorer margins of BPA, polyols, and propylene oxide that were partly offset by the strong margin of phenol.

### Still in the doldrums

We maintain REDUCE and our TP of 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.



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	2.2	(5.1)	(19.8)
Relative to country (%)	(1.6)	(5.9)	(23.7)
Mkt cap (USD m)	5,922		
3m avg. daily turnover (USD m)	17.4		
Free float (%)	51		
Major shareholder	PTT Plc. (48%)		
12m high/low (THB)	67.00/41.75		
Issued shares (m)	4,508.85		

Sources: Bloomberg consensus; FSSIA estimates



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## Exhibit 1: Summary of 2Q22/6M22 operations

	2Q21	1Q22	2Q22			6M21	6M22E	Change	2022E
	(THB m)	(THB m)	(THB m)	(q-q %)	(y-y %)	(THB m)	(THB m)	(y-y %)	(THB m)
<b>Revenue</b>	<b>112,627</b>	<b>176,767</b>	<b>197,603</b>	<b>11.8</b>	<b>75.4</b>	<b>215,303</b>	<b>374,370</b>	<b>73.9</b>	<b>497,682</b>
Operating costs	(95,817)	(166,179)	(186,223)	12.1	94.4	(182,089)	(352,402)	93.5	(417,564)
<b>EBITDA</b>	<b>16,810</b>	<b>10,588</b>	<b>11,380</b>	<b>7.5</b>	<b>(32.3)</b>	<b>33,214</b>	<b>21,968</b>	<b>(33.9)</b>	<b>56,461</b>
<i>EBITDA margin (%)</i>	14.9	6.0	5.8	nm	nm	15.4	5.9	nm	11.3
Depn & amort.	(5,589)	(6,837)	(6,782)	(0.8)	21.3	(11,047)	(13,619)	23.3	(26,991)
EBIT	11,801	11,920	16,963	nm	43.7	22,602	28,882	27.8	29,470
Interest expense	(1,530)	(2,101)	(2,428)	15.6	58.7	(2,713)	(4,529)	66.9	(4,654)
Interest & invt inc	22,762	811	818	0.9	(96.4)	23,170	1,629	(93.0)	1,572
Associates' contrib	2,324	1,142	1,549	35.6	(33.3)	4,216	2,692	(36.2)	6,753
Exceptionals	(4,590)	(6,908)	(15,400)	122.9	nm	(5,961)	(22,308)	nm	2,359
<b>Pretax profit</b>	<b>30,767</b>	<b>4,865</b>	<b>1,502</b>	<b>(69.1)</b>	<b>(95.1)</b>	<b>41,314</b>	<b>6,367</b>	<b>(84.6)</b>	<b>35,333</b>
Tax	(5,591)	(184)	324	(276.6)	(105.8)	(6,311)	140	(102.2)	(4,434)
<i>Tax rate (%)</i>	18.2	3.8	(21.6)	(671.7)	(218.7)	15.3	(2.2)	(114.4)	12.5
Minority interests	(141)	(470)	(438)	(6.7)	210.4	(273)	(907)	nm	(371)
<b>Net profit</b>	<b>25,035</b>	<b>4,212</b>	<b>1,388</b>	<b>(67.0)</b>	<b>(94.5)</b>	<b>34,730</b>	<b>5,600</b>	<b>(83.9)</b>	<b>30,528</b>
Non-recurring items	14,576	(2,024)	(12,315)	508.3	(184.5)	15,502	(14,339)	(192.5)	1,501
<b>Core net profit</b>	<b>10,459</b>	<b>6,236</b>	<b>13,703</b>	<b>119.7</b>	<b>31.0</b>	<b>19,228</b>	<b>19,939</b>	<b>3.7</b>	<b>29,027</b>
EPS (THB)	5.55	0.93	0.31	(67.0)	(94.5)	7.70	1.24	(83.9)	6.77
Core EPS (THB)	2.32	1.38	3.04	119.7	31.0	4.26	4.42	3.7	6.44

Sources: PTTGC; FSSIA estimates

## Exhibit 2: 2Q22/6M22 key quarterly indicators

	2Q21	1Q22	2Q22	Change		6M21	6M22	Change
				(q-q %)	(y-y %)			(y-y %)
<b>Utilisation rate (%)*</b>								
Olefins	93	85	75	(10.0)	(18.0)	98	80	(18.0)
Polymer	105	106	90	(16.0)	(15.0)	105	98	(7.0)
MEG	104	66	88	22.0	(16.0)	104	77	(27.0)
Refinery	101	101	98	(3.0)	(3.0)	101	99	(2.0)
Aromatics	102	100	80	(20.0)	(22.0)	100	90	(10.0)
Phenol	115	119	118	(1.0)	3.0	117	119	2.0
BPA	103	119	112	(7.0)	9.0	108	115	7.0
PO	98	104	81	(23.0)	(17.0)	94	92	(2.0)
<b>Margins</b>								
<b>Refinery (USD/bbl)</b>								
Market GRM	2.03	7.60	21.09	177.5	938.9	2.59	14.32	452.9
Hedging gain (loss)	(1.57)	(16.61)	(20.71)	24.7	1,219.1	(0.92)	(18.65)	1,927.2
Stock gain (loss)	1.42	4.53	4.87	7.5	243.0	1.94	4.70	142.3
Accounting GRM	1.88	(4.48)	5.25	(217.2)	179.3	3.61	0.37	(89.8)
<b>Aromatics (USD/t)</b>								
Market P2F	181.0	48.0	117.0	143.8	(35.4)	162	81	(50.0)
Hedging gain (loss)	(13.2)	2.6	(109.3)	(4,303.8)	728.0	(9.9)	(51.4)	419.2
Stock gain (loss)	37.6	129.0	35.8	(72.2)	(4.8)	49.4	84.5	71.1
Accounting P2F	205.0	179.0	44.0	(75.4)	(78.5)	202	114	(43.6)
<b>Olefins (USD/t)</b>								
HDPE price	1,191	1,330	1,341	0.8	12.6	1,168	1,336	14.4
Naphtha	606	877	875	(0.2)	44.4	581	876	50.8
HDPE-naphtha	585	453	466	2.9	(20.3)	587	460	(21.6)
<b>Net profit breakdown by product group (THB m)</b>								
Olefins & derivatives	5,033	1,860	1,956	5.2	(61.1)	9,926	3,816	(61.6)
Refinery	(276)	(2,754)	1,757	(163.8)	(736.6)	972	(997)	(202.6)
Aromatics	1,482	431	(501)	(216.2)	(133.8)	2,548	(70)	(102.7)
EO/EG, JV	1,574	(39)	(8,696)	22,197.4	(652.5)	748	(8,735)	(1,267.8)
Green chemical	(2,971)	358	287	(19.8)	(109.7)	(2,840)	645	(122.7)
High volume specialties	3,454	1,238	739	(40.3)	(78.6)	6,156	1,977	(67.9)
Services & others	16,739	3,118	5,846	87.5	(65.1)	17,220	8,964	(47.9)
<b>Total net profit</b>	<b>25,035</b>	<b>4,212</b>	<b>1,388</b>	<b>(67.0)</b>	<b>(94.5)</b>	<b>34,730</b>	<b>5,600</b>	<b>(83.9)</b>
<b>EBITDA margin (%)*</b>								
Overall	15	6	6	-	(9.0)	16	6	(10.0)
Overall excluding stock gain/loss	14	8	11	3.0	(3.0)	14	9	(1.0)
Olefins & derivatives	26	11	9	(2.0)	(17.0)	26	10	(16.0)
Refinery	(1)	5	12	7.0	13.0	2	9	7.0
Aromatics	12	(6)	4	10.0	(8.0)	11	(1)	(12.0)
Green	5	11	11	-	6.0	6	11	5.0
HVS	30	15	10	(5.0)	(20.0)	29	12	(17.0)

\*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)
<b>Gross profit</b>	<b>34,695</b>	<b>83,914</b>	<b>80,118</b>	<b>80,039</b>	<b>81,206</b>
Other operating income	-	-	-	-	-
Operating costs	(14,881)	(21,727)	(23,657)	(22,292)	(22,502)
<b>Operating EBITDA</b>	<b>19,813</b>	<b>62,186</b>	<b>56,461</b>	<b>57,747</b>	<b>58,704</b>
Depreciation	(22,497)	(24,744)	(26,991)	(29,238)	(31,484)
Goodwill amortisation	0	0	0	0	0
<b>Operating EBIT</b>	<b>(2,683)</b>	<b>37,443</b>	<b>29,470</b>	<b>28,510</b>	<b>27,220</b>
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)
<b>Profit before tax</b>	<b>543</b>	<b>52,778</b>	<b>35,333</b>	<b>34,277</b>	<b>32,553</b>
Tax	109	(7,228)	(4,434)	(4,349)	(4,211)
<b>Profit after tax</b>	<b>652</b>	<b>45,550</b>	<b>30,899</b>	<b>29,928</b>	<b>28,342</b>
Minority interests	(452)	(568)	(371)	(371)	(371)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
<b>Reported net profit</b>	<b>200</b>	<b>44,982</b>	<b>30,528</b>	<b>29,557</b>	<b>27,971</b>
<b>Non-recurring items &amp; goodwill (net)</b>	<b>7,156</b>	<b>(13,635)</b>	<b>(1,501)</b>	<b>(1,503)</b>	<b>486</b>
<b>Recurring net profit</b>	<b>7,356</b>	<b>31,347</b>	<b>29,027</b>	<b>28,054</b>	<b>28,457</b>
<b>Per share (THB)</b>					
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
<b>Growth</b>					
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)
<b>Operating performance</b>					
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					
<b>Revenue by Division (THB m)</b>					
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
<b>Cash flow from operations</b>	<b>28,291</b>	<b>54,854</b>	<b>61,233</b>	<b>66,506</b>	<b>67,262</b>
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)
<b>Cash flow from investing</b>	<b>(41,770)</b>	<b>(41,760)</b>	<b>(41,760)</b>	<b>(41,760)</b>	<b>(41,760)</b>
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
<b>Cash flow from financing</b>	<b>32,231</b>	<b>(1,794)</b>	<b>(45,386)</b>	<b>(35,770)</b>	<b>(37,293)</b>
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
<b>Net other adjustments</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Movement in cash</b>	<b>18,752</b>	<b>11,301</b>	<b>(25,912)</b>	<b>(11,024)</b>	<b>(11,791)</b>
Free cash flow to firm (FCFF)	(9,667.83)	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)	2020	2021	2022E	2023E	2024E
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)
<b>Tangible fixed assets (net)</b>	<b>243,254</b>	<b>258,511</b>	<b>271,520</b>	<b>282,282</b>	<b>290,798</b>
<b>Intangible fixed assets (net)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
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
<b>Current assets</b>	<b>129,911</b>	<b>207,244</b>	<b>132,611</b>	<b>117,121</b>	<b>105,514</b>
Other assets	64,426	229,567	229,567	209,567	189,567
<b>Total assets</b>	<b>489,383</b>	<b>754,115</b>	<b>700,245</b>	<b>683,006</b>	<b>667,404</b>
Common equity	281,015	318,242	318,341	310,704	301,948
Minorities etc.	7,979	9,361	4,790	5,161	5,532
<b>Total shareholders' equity</b>	<b>288,994</b>	<b>327,603</b>	<b>323,131</b>	<b>315,866</b>	<b>307,480</b>
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
<b>Long-term liabilities</b>	<b>141,347</b>	<b>279,506</b>	<b>227,316</b>	<b>219,991</b>	<b>212,665</b>
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
<b>Current liabilities</b>	<b>59,041</b>	<b>147,007</b>	<b>149,798</b>	<b>147,150</b>	<b>147,259</b>
<b>Total liabilities and shareholders' equity</b>	<b>489,383</b>	<b>754,115</b>	<b>700,245</b>	<b>683,006</b>	<b>667,404</b>
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)	2020	2021	2022E	2023E	2024E
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	2020	2021	2022E	2023E	2024E
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
<b>Recurring P/E (x) *</b>	<b>28.5</b>	<b>6.7</b>	<b>7.2</b>	<b>7.5</b>	<b>7.4</b>
<b>Recurring P/E @ target price (x) *</b>	<b>24.5</b>	<b>5.8</b>	<b>6.2</b>	<b>6.4</b>	<b>6.3</b>
Reported P/E (x)	1,050.2	4.7	6.9	7.1	7.5
Dividend yield (%)	0.0	8.1	7.0	6.8	6.4
Price/book (x)	0.7	0.7	0.7	0.7	0.7
Price/tangible book (x)	0.7	0.7	0.7	0.7	0.7
EV/EBITDA (x) **	15.2	6.3	7.4	7.2	7.1
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 2021

 <b>EXCELLENT LEVEL – Score range 90-100</b>										
AAV	BCPG	CPALL	GCAP	K	MSC	PLANET	SAMART	SPI	THRE	TVD
ADVANC	BDMS	CPF	GFPT	KBANK	MST	PLAT	SAMTEL	SPRC	THREL	TVI
AF	BEM	CPI	GGC	KCE	MTC	PORT	SAT	SPVI	TIPCO	TVO
AH	BGC	CPN	GLAND	KKP	MVP	PPS	SC	SSSC	TISCO	TWPC
AIRA	BGRIM	CRC	GLOBAL	KSL	NCL	PR9	SCB	SST	TK	U
AKP	BIZ	CSS	GPI	KTB	NEP	PREB	SCC	STA	TKT	UAC
AKR	BKI	DDD	GPSC	KTC	NER	PRG	SCCC	STEC	TMT	UBIS
ALT	BOL	DELTA	GRAMMY	LALIN	NKI	PRM	SCG	STI	TNDT	UV
AMA	BPP	DEMCO	GULF	LANNA	NOBLE	PROUD	SCGP	SUN	TNITY	VGI
AMATA	BRR	DRT	GUNKUL	LH	NSI	DRSH	SCM	SUSCO	TOA	VIH
AMATAV	BTS	DTAC	HANA	LHFG	NVD	PSL	SDC	SUTHA	TOP	WACOAL
ANAN	BTW	DUSIT	HARN	LIT	NWR	PTG	SEAFCO	SVI	TPBI	WAVE
AOT	BWG	EA	HMPRO	LPN	NYT	PTT	SEAOIL	SYMC	TQM	WHA
AP	CENTEL	EASTW	ICC	MACO	OISHI	PTTEP	SE-ED	SYNTEC	TRC	WHAUP
ARIP	CFRESH	ECF	ICHI	MAJOR	OR	PTTGC	SELIC	TACC	TRU	WICE
ARROW	CHEWA	ECL	III	MAKRO	ORI	PYLON	SENA	TASCO	TRUE	WINNER
ASP	CHO	EE	ILINK	MALEE	OSP	Q-CON	SHR	TCAP	TSC	ZEN
AUCT	CIMBT	EGCO	ILM	MBK	OTO	QH	SIRI	TEAMG	TSR	
AWC	CK	EPG	INTUCH	MC	PAP	QTC	SIS	TFMAMA	TSTE	
AYUD	CKP	ETC	IP	MCOT	PCSGH	RATCH	SITHAI	TGH	TSTH	
BAFS	CM	FPI	IRPC	METCO	PDG	RS	SMK	THANA	TTA	
BANPU	CNT	FPT	ITEL	MFEC	PDJ	S	SMPC	THANI	TTB	
BAY	COM7	FSMART	IVL	MINT	PG	S & J	SNC	THCOM	TTCL	
BBL	COMAN	GBX	JSP	MONO	PHOL	SAAM	SONIC	THG	TTW	
BCP	COTTO	GC	JWD	MOONG	PLANB	SABINA	SPALI	THIP	TU	
 <b>VERY GOOD LEVEL – Score range 80-89</b>										
2S	ASIMAR	CHOW	FLOYD	IT	LOXLEY	OCC	RPC	SKY	TCC	TVT
7UP	ASK	CI	FN	ITD	LRH	OGC	RT	SLP	TCMC	TWP
ABICO	ASN	CIG	FNS	J	LST	PATO	RWI	SMIT	TEAM	UEC
ABM	ATP30	CMC	FORTH	JAS	M	PB	S11	SMT	TFG	UMI
ACE	B	COLOR	FSS	JCK	MATCH	PICO	SA	SNP	TFI	UOBKH
ACG	BA	CPL	FTE	JCKH	MBAX	PIMO	SAK	SO	TIGER	UP
ADB	BAM	CPW	FVC	JMART	MEGA	PJW	SALEE	SORKON	TITLE	UPF
AEONTS	BC	CRD	GEL	JMT	META	PL	SAMCO	SPA	TKN	UPOIC
AGE	BCH	CSC	GENCO	KBS	MFC	PM	SANKO	SPC	TKS	UTP
AHC	BEC	CSP	GJS	KCAR	MGT	PMTA	SAPPE	SPCG	TM	VCOM
AIT	BEYOND	CWT	GYT	KEX	MICRO	PPP	SAWAD	SR	TMC	VL
ALL	BFIT	DCC	HEMP	KGI	MILL	PPP	SCI	SRICHA	TMD	VPO
ALLA	BJC	DCON	HPT	KIAT	MITSIB	PRIME	SCN	SSC	TMI	VRANDA
ALUCON	BJCHI	DHOUSE	HTC	KISS	MK	PRIN	SCP	SSF	TMILL	WGE
AMANAH	BLA	DOD	HYDRO	KOOL	MODERN	PRINC	SE	STANLY	TNL	WIK
AMARIN	BR	DOHOME	ICN	KTIS	MTI	PSG	SFLEX	STGT	TNP	WP
APCO	BROOK	DV8	IFS	KUMWEL	NBC	PSTC	SFP	STOWER	TOG	XO
APCS	CBG	EASON	IMH	KUN	NCAP	PT	SFT	STPI	TPA	XPG
APURE	CEN	EFORL	IND	KWC	NCH	QLT	SGF	SUC	TPAC	YUASA
AQUA	CGH	ERW	INET	KWM	NETBAY	RBF	SIAM	SWC	TPCS	
ASAP	CHARAN	ESSO	INSET	L&E	NEX	RCL	SINGER	SYNEX	TPS	
ASEFA	CHAYO	ESTAR	INSURE	LDC	NINE	RICHY	SKE	TAE	TRITN	
ASIA	CHG	ETE	IRC	LEO	NRF	RML	SKN	TAKUNI	TRT	
ASIAN	CHOTI	FE	IRCP	LHK	NTV	ROJNA	SKR	TBSP	TSE	
 <b>GOOD LEVEL – Score range 70-79</b>										
A	BGT	CITY	GIFT	JTS	MDX	PK	SGP	SUPER	TQR	YGG
AI	BH	CMAN	GLOCON	JUBILE	MJD	PLE	SICT	SVOA	TTI	ZIGA
AIE	BIG	CMO	GREEN	KASET	MORE	PPM	SIMAT	TC	TYCN	
AJ	BLAND	CMR	GSC	KCM	MUD	PRAKIT	SISB	TCCC	UKEM	
ALPHAX	BM	CPT	GTB	KK	NC	PRAPAT	SK	THMUI	UMS	
AMC	BROCK	CRANE	HTECH	KKC	NDR	PRECHA	SMART	TNH	UNIQ	
APP	BSBM	CSR	HUMAN	KWI	NFC	PTL	SOLAR	TNR	UPA	
AQ	BSM	D	IHL	KYE	NNCL	RJH	SPACK	TOPP	UREKA	
ARIN	BTNC	EKH	IIG	LEE	NOVA	RP	SPG	TPCH	VIBHA	
AS	BYD	EMC	INGRS	LPH	NPK	RPH	SQ	TPIPL	W	
AU	CAZ	EP	INOX	MATI	NUSA	RSP	SSP	TIPIP	WIN	
B52	CCP	F&D	JAK	M-CHAI	PAF	SABUY	STARK	TPLAS	WORK	
BEAUTY	CGD	FMT	JR	MCS	PF	SF	STC	TPOLY	WPH	

**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

Sources: Thai Institute of Directors Association (IOD); FSSIA's compilation; data as of 26 October 2021

## Anti-corruption Progress Indicator

CERTIFIED										
2S	BCH	CPALL	GC	K	MFC	PE	QLT	SNP	THCOM	TU
7UP	BCP	CPF	GCAP	KASET	MFEC	PG	QTC	SORKON	THIP	TVD
ADVANC	BCPG	CPI	GEL	KBANK	MILL	PHOL	RATCH	SPACK	THRE	TVI
AF	BE8	CPN	GFPT	KBS	MINT	PK	RML	SPALI	THREL	TVO
AI	BEYOND	CSC	GGC	KCAR	MONO	PL	RWI	SPC	TIDLOR	TWPC
AIE	BGC	DCC	GJS	KCE	MOONG	PLANB	S & J	SPI	TIPCO	U
AIRA	BGRIM	DELTA	GPI	KGI	MSC	PLANET	SAAM	SPRC	TISCO	UBE
AKP	BJCHI	DEMCO	GPSC	KKP	MST	PLAT	SABINA	SRICHA	TKS	UBIS
ALPHAX	BKI	DIMET	GSTEEL	KSL	MTC	PM	SAPPE	SSF	TKT	UEC
AMA	BLA	DRT	GUNKUL	KTB	MTI	PPP	SAT	SSP	TMD	UKEM
AMANAHA	BPP	DTAC	HANA	KTC	NBC	PPPM	SC	SSSC	TMILL	UOBKH
AMATA	BROOK	DUSIT	HARN	KWC	NEP	PPS	SCB	SST	TMT	UPF
AMATAV	BRR	EA	HEMP	KWI	NINE	PR9	SCC	STA	TNITY	UV
AP	BSBM	EASTW	HENG	L&E	NKI	PREB	SCCC	STOWER	TNL	VGI
APCS	BTS	ECL	HMPRO	LANNA	NMG	PRG	SCG	SUSCO	TNP	VIH
AQUA	BWG	EGCO	HTC	LH	NNCL	PRINC	SCN	SVI	TNR	WACOAL
ARROW	CEN	EP	ICC	LHFG	NOBLE	PRM	SEAOIL	SYMC	TOG	WHA
AS	CENTEL	EPG	ICHI	LHK	NOK	PROS	SE-ED	SYNTEC	TOP	WHAUP
ASIAN	CFRESH	ERW	IFEC	LPN	NSI	PSH	SELIC	TAE	TOPP	WICE
ASK	CGH	ESTAR	IFS	LRH	NWR	PSL	SENA	TAKUNI	TPA	WIJK
ASP	CHEWA	ETE	ILINK	M	OCC	PSTC	SGP	TASCO	TPP	XO
AWC	CHOTI	FE	INET	MAKRO	OGC	PT	SINGER	TBSP	TRU	ZEN
AYUD	CHOW	FNS	INSURE	MALEE	ORI	PTG	SIRI	TCAP	TRUE	
B	CIG	FPI	INTUCH	MATCH	PAP	PTT	SITHAI	TCMC	TSC	
BAFS	CIMBT	FPT	IRC	MBAX	PATO	PTTEP	SKR	TFG	TSTE	
BAM	CM	FSMART	IRPC	MBK	PB	PTTGC	SMIT	TFI	TSTH	
BANPU	CMC	FSS	ITEL	MC	PCSGH	PYLON	SMK	TFMAMA	TTA	
BAY	COM7	FTE	IVL	MCOT	PDG	Q-CON	SMPC	TGH	TTB	
BBL	COTTO	GBX	JKN	META	PDJ	QH	SNC	THANI	TTCL	
DECLARED										
AJ	CHG	DDD	ETC	JR	MAJOR	NUSA	RS	SSS	TQM	YUASA
ALT	CPL	DHOUSE	FLOYD	JTS	NCAP	NYT	SAK	STECH	TSI	ZIGA
APCO	CPR	DOHOME	GULF	KEX	NCL	OR	SCGP	STGT	VARO	
B52	CPW	ECF	III	KUMWEL	NOVA	PIMO	SCM	TKN	VCOM	
BEC	CRC	EKH	INOX	LDC	NRF	PLE	SIS	TMI	VIBHA	

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 26 October 2021) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Sources: 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

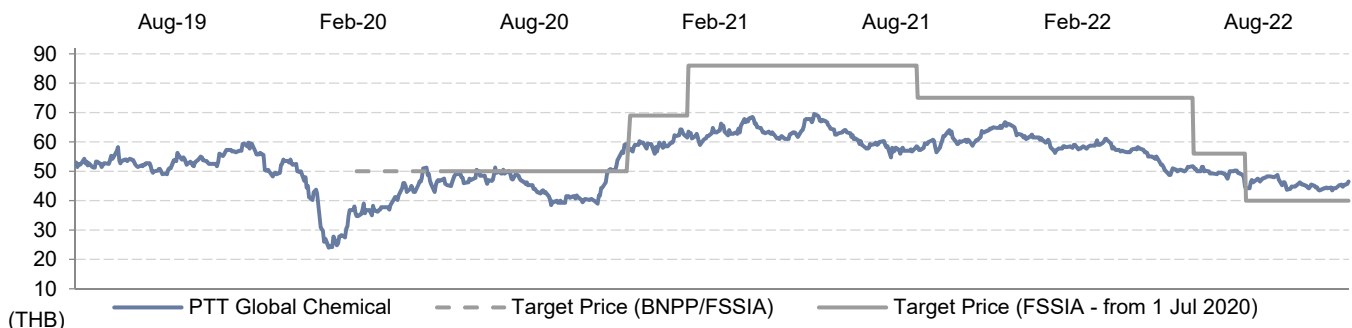
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### History of change in investment rating and/or target price

#### 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	12-May-2022	REDUCE	40.00

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 46.50	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 09-Aug-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.