

**Outperform - Upgraded**

Price as of 6 Jan 2026	31.75
12M target price (Bt/shr)	35.00
Unchanged/Revised up/down(%)	Unchanged
Upside/downside (%)	10.2

**Key messages**

The National Energy Policy Council (NEPC) has approved a new natural gas pricing structure, known as the Utility Model to better reflect true costs and ensure fairness among natural gas users across all sectors. The Utility Model is replacing the Single Pool Gas Price model and took effect from January 1, 2026 onward. In addition, we upgrade our rating on PTT to Outperform, from Neutral, while maintaining 2026F target price at Bt35.00, based on SoTP methodology. The rating upgrade is driven by i) a positive outlook from the impact of the new Utility Model on PTT in 2026F, ii) attractive dividend yields of 6.6% in 2025F-2027F, and iii) expected stronger earnings performance in 4Q25F, largely reflecting an extra gain from the sale of up to 2% of its shares in Taiwan's Lotus Pharmaceutical.

**Trading data**

Mkt cap (Btbn/US\$bn)	907/28.9
Outstanding shares (mn)	28,563
Foreign ownership (mn)	2,051
3M avg. daily trading (mn)	42.4
52-week trading range (Bt)	27.25 – 33.75
Performance (%)	3M 6M 12M
Absolute	(0.8) 5.0 (0.8)
Relative	0.9 (9.1) 6.2

**Quarterly EPS**

	1Q	2Q	3Q	4Q
2023	0.98	0.70	1.10	1.15
2024	1.01	1.24	0.57	0.33
2025	0.82	0.75	0.69	

**Share price chart**


Source: SET

Kaweewit Thawilwithayanon, CISA  
66.2658.8888 Ext. 8847  
kaweewitt@kgi.co.th

**COMPANY UPDATE**
**Thailand**
**PTT Pcl.**
**(PTT.BK/PTT TB)\***

**Utility Model: Structural gas pricing reform from 2026**
**Event**

Full-year earnings forecasts revised up and rating upgraded.

**Impact**
**New natural gas pricing structure (Utility Model), effective January 1, 2026**

The National Energy Policy Council (NEPC) has approved a new natural gas pricing structure, known as the Utility Model to better reflect true costs and ensure fairness among natural gas users across all sectors. The Utility Model is replacing the Single Pool Gas Price model and took effect from January 1, 2026 onward. The key features of the new pricing structure are as follows:

- i) Natural gas supplied to and withdrawn from gas separation plants, including gas for the petrochemical sector and LPG production, will be priced based on the Gulf of Thailand gas price.
- ii) Natural gas used for the power generation sector, the NGV sector, and the industrial sector will be priced under the Pool Price, which is a weighted average price of gas from three sources: the Gulf of Thailand, Myanmar, and LNG.
- iii) Under this framework, the price of Gulf of Thailand gas supplied to gas separation plants will be 10% higher than the price of Gulf of Thailand gas used in the Pool Price calculation. The gas separation plants will bear this price differential.

**Adjust up our earnings projections by 7%/2% in 2025F/2026F**

We raise our earnings forecasts by 7% to Bt89.6bn in 2025F and 2% to Bt98.9bn in 2026F due to i) revisions to our estimates for its two major listed subsidiaries – PTT Exploration and Production (PTTEP.BK/PTTEP TB)\*, PTT Global Chemical (PTTGC.BK/PTTGC TB)\* – made during November – December 2025, ii) an anticipated extra gain of approximately Bt8.0bn from the sale of up to 2% of its shares in Taiwan's Lotus Pharmaceutical (Lotus) and the reclassification of Lotus from a subsidiary to an associated company in 2025F, and iii) estimated benefits of Bt2.7bn in 2026F from the Utility Model versus the Single Pool Gas Price model. The Utility Model benefit estimate is based on assumptions of i) LNG price of US\$10/mmbtu in 2026F, ii) Myanmar gas price of US\$9.0/mmbtu in 2026F, iii) the Gulf of Thailand gas price of US\$5.4/mmbtu in 2026F, iv) gas supply to the petrochemical sector of 564 mmscf/d and gas withdrawals from gas separation plants of 1,454 mmscf/d, as shown in Figure 2.

**Valuation & action**

We upgrade our rating on PTT to Outperform, from Neutral, while maintaining 2026F target price at Bt35.00, based on SoTP methodology. The rating upgrade is driven by i) a positive outlook from the impact of the new Utility Model on PTT in 2026F, ii) attractive dividend yields of 6.6% in 2025F-2027F, and iii) expected stronger earnings performance in 4Q25F, largely reflecting an extra gain from the sale of up to 2% of its shares in Taiwan's Lotus Pharmaceutical.

**Risks**

Volatility in crude price, GRM, and petrochemical spreads.

**Key financials and valuations**

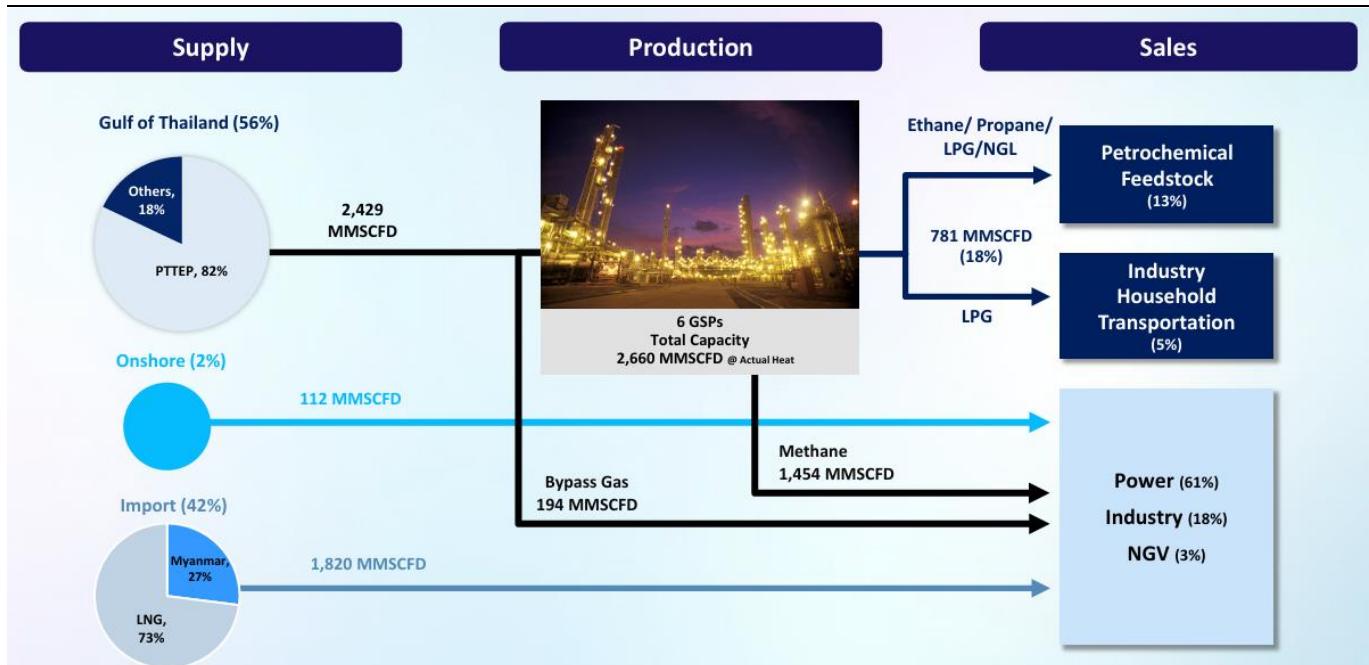
	Dec-23A	Dec-24A	Dec-25F	Dec-26F	Dec-27F
Revenue (Bt mn)	3,144,551	3,090,453	2,680,875	2,600,044	2,638,859
Gross profit (Bt mn)	361,461	321,121	283,204	324,195	338,453
EBIT (Bt mn)	269,873	225,864	193,920	228,544	239,303
Net profit (Bt mn)	112,024	90,072	89,598	98,858	105,302
EPS (Bt)	3.92	3.15	3.14	3.46	3.69
DPS (Bt)	2.00	2.10	2.10	2.10	2.10
EPS growth (%)	22.9	(19.6)	(0.5)	10.3	6.5
P/E (x)	8.1	10.1	10.1	9.2	8.6
P/B (x)	0.8	0.8	0.8	0.7	0.7
EV/EBITDA (x)	3.6	3.8	3.9	3.5	3.2
Net debt to equity (x)	0.4	0.4	0.4	0.3	0.3
Dividend yield (%)	6.3	6.6	6.6	6.6	6.6
Return on avg. equity (%)	7.1	5.5	5.4	5.8	6.0

Source: Company data, KGI Securities Research

**Figure 1: Changes in key assumptions for 2025F-2026F**

Our assumptions	2025F Previous	2025F Revised	Change (%)	2026F Previous	2026F Revised	Change (%)
<b>Subsidiaries' earnings</b>						
PTTEP (Bt mn)	58,621	58,648	0.0	53,542	56,255	5.1
PTTGC (Bt mn)	(10,522)	(12,323)	(17.1)	5,199	4,042	(22.3)
TOP (Bt mn)	16,443	16,443	0.0	14,755	14,755	0.0
IRPC (Bt mn)	(3,692)	(3,692)	0.0	1,097	1,097	0.0
GPSC (Bt mn)	6,060	6,060	0.0	5,676	5,676	0.0
OR (Bt mn)	12,607	12,607	0.0	14,327	14,327	0.0
<b>Income statement</b>						
Extra gain from Lotus Pharmaceutical (Bt mn)	-	8,000	N.A.	-	-	N.A.
Benefits of Utility Model over Single Pool Gas Price Model (Bt mn)	-	-	N.A.	-	+2,694	N.A.
Earnings (Bt mn)	83,685	89,598	7.1	96,959	98,858	2.0

Source: Company data, KGI Securities Research

**Figure 2: Thailand's natural gas balance for January – December 2024**


Source: Company data, KGI Securities Research

**Figure 3: Key assumptions for PTT**

	2023	2024	2025F	2026F	2027F
<b><u>Benchmark</u></b>					
Dubai crude price (US\$/bbl)	82	80	70	65	65
JKM LNG price (US\$/mmbtu)	14.4	11.9	13.0	10.0	8.0
<b><u>Refinery</u></b>					
Gasoline spread (US\$/bbl)	16.7	13.4	11.0	13.0	13.0
Jet oil spread (US\$/bbl)	22.5	15.6	16.0	17.0	18.0
Diesel spread (US\$/bbl)	21.9	16.6	16.0	17.0	18.0
<b><u>Olefins</u></b>					
HDPE-naphtha (US\$/ton)	394	339	330	360	390
PP-naphtha (US\$/ton)	358	359	350	365	380
<b><u>Aromatics</u></b>					
PX-naphtha (US\$/ton)	389	290	223	265	319
BZ-naphtha (US\$/ton)	248	310	153	195	249
<b><u>Gas BU</u></b>					
NG sales volume (mmscfd)	4,448	4,405	3,856	3,921	3,988
<b><u>Trading BU</u></b>					
Contribution margin (Bt/liter)	0.13	0.09	0.10	0.10	0.10
Sales volume (mn liters)	105,091	108,061	105,000	106,502	108,024
<b><u>Subsidiaries' earnings</u></b>					
PTTEP (Bt mn)	76,706	78,824	58,648	56,255	55,785
PTTGC (Bt mn)	999	(29,811)	(12,323)	4,042	7,318
TOP (Bt mn)	19,443	9,959	16,443	14,755	17,652
IRPC (Bt mn)	(2,923)	(5,193)	(3,692)	1,097	1,440
GPSC (Bt mn)	3,694	4,062	6,060	5,676	6,042
OR (Bt mn)	11,094	7,650	12,607	14,327	14,915

Source: Company data, KGI Securities Research

**Figure 4: Company profile**

PTT Pcl (PTT) operates its petroleum and petrochemical complex through its subsidiaries and affiliated companies covering the full spectrum of natural gas businesses such as exploration and production from both domestic and oversea sources, transportation of natural gas via pipeline system, gas separation as well as marketing of natural gas, international business operations for the oil and petrochemical products, and investment in refining and petrochemical industries and other related businesses both domestic and abroad.

Source: Company data, KGI Securities Research

**Figure 6: Gross profit**

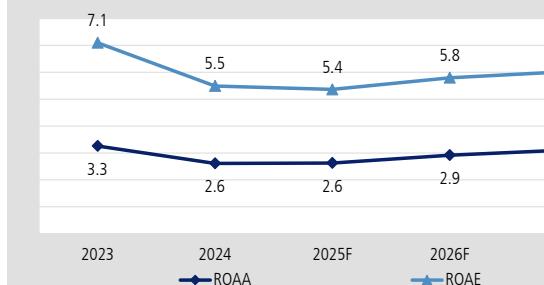
Gross profit, Bt bn (LHS); gross profit margin, percent (RHS)



Source: Company data, KGI Securities Research

**Figure 8: Company ROAA and ROAE**

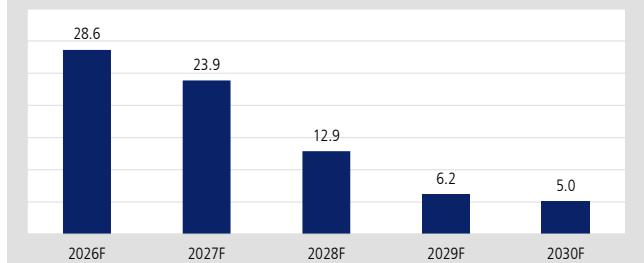
ROAA and ROAE, percent



Source: Company data, KGI Securities Research

**Figure 10: Five-year investment plan of PTT alone**

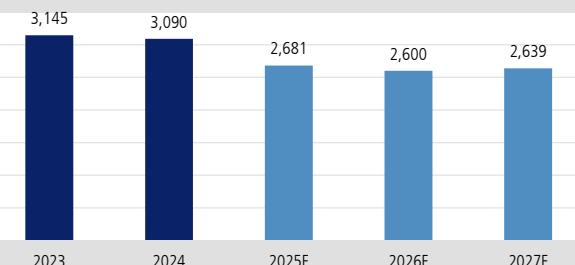
CAPEX, Bt bn



Source: Company data, KGI Securities Research

**Figure 5: Revenue**

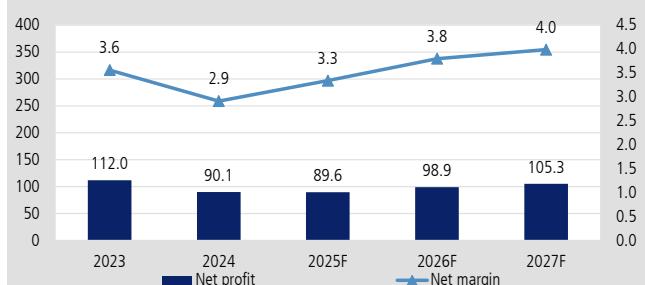
Revenue, Bt bn



Source: Company data, KGI Securities Research

**Figure 7: Net profit**

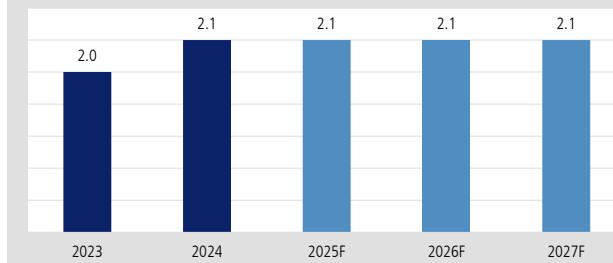
Net profit, Bt bn (LHS); net profit margin, percent (RHS)



Source: Company data, KGI Securities Research

**Figure 9: Dividend**

Dividend per share, Bt



Source: Company data, KGI Securities Research

**Figure 11: Company trading PB**

Times



Source: KGI Securities Research

**Quarterly Income Statement**

(Bt mn)	Mar-23A	Jun-23A	Sep-23A	Dec-23A	Mar-24A	Jun-24A	Sep-24A	Dec-24A	Mar-25A	Jun-25A	Sep-25A
Income Statement (Bt mn)											
<b>Revenue</b>	<b>756,811</b>	<b>778,158</b>	<b>802,722</b>	<b>806,861</b>	<b>782,279</b>	<b>821,943</b>	<b>761,858</b>	<b>724,374</b>	<b>700,223</b>	<b>676,754</b>	<b>646,689</b>
Cost of Goods Sold	(670,076)	(701,266)	(679,294)	(732,454)	(681,628)	(728,107)	(713,070)	(646,528)	(626,039)	(619,605)	(578,452)
<b>Gross Profit</b>	<b>86,735</b>	<b>76,892</b>	<b>123,428</b>	<b>74,407</b>	<b>100,651</b>	<b>93,836</b>	<b>48,788</b>	<b>77,846</b>	<b>74,184</b>	<b>57,149</b>	<b>68,237</b>
Operating Expenses	(28,102)	(28,705)	(29,171)	(46,315)	(28,906)	(31,813)	(41,099)	(41,364)	(27,476)	(30,344)	(30,988)
Other incomes	6,560	7,074	7,305	19,766	13,775	16,164	7,840	10,146	8,294	12,019	9,413
<b>Operating Profit</b>	<b>65,193</b>	<b>55,262</b>	<b>101,561</b>	<b>47,858</b>	<b>85,520</b>	<b>78,186</b>	<b>15,530</b>	<b>46,627</b>	<b>55,002</b>	<b>38,824</b>	<b>46,662</b>
Depreciation of fixed assets	41,258	41,040	44,655	46,112	44,555	49,650	47,930	43,782	44,800	46,840	45,741
<b>Operating EBITDA</b>	<b>106,451</b>	<b>96,302</b>	<b>146,216</b>	<b>93,969</b>	<b>130,076</b>	<b>127,837</b>	<b>63,460</b>	<b>90,410</b>	<b>99,802</b>	<b>85,665</b>	<b>92,403</b>
<b>Non-Operating Income</b>	<b>0</b>	<b>1,639</b>	<b>0</b>	<b>4,564</b>	<b>0</b>	<b>299</b>	<b>2,682</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Interest Income	0	0	0	0	0	0	0	0	0	0	0
Other Non-op Income	0	1,639	0	4,564	0	299	2,682	0	0	0	0
<b>Non-Operating Expenses</b>	<b>(12,711)</b>	<b>(11,437)</b>	<b>(29,499)</b>	<b>(11,134)</b>	<b>(17,189)</b>	<b>(12,242)</b>	<b>(11,683)</b>	<b>(15,620)</b>	<b>(11,945)</b>	<b>(11,685)</b>	<b>(12,533)</b>
Interest Expenses	(10,843)	(11,437)	(11,969)	(11,134)	(11,997)	(12,242)	(11,683)	(10,898)	(10,985)	(10,562)	(9,985)
Other Non-op Expenses	(1,868)	0	(17,529)	0	(5,192)	0	0	(4,722)	(960)	(1,123)	(2,548)
Net Investment Income/(Loss)	528	318	552	1,615	(35)	500	(8,355)	1,223	325	7,938	313
<b>Pre-tax Profit</b>	<b>53,010</b>	<b>45,781</b>	<b>72,614</b>	<b>42,903</b>	<b>68,296</b>	<b>66,743</b>	<b>(1,826)</b>	<b>32,230</b>	<b>43,381</b>	<b>35,078</b>	<b>34,442</b>
Current Taxation	(23,366)	(14,111)	(24,511)	(19,325)	(19,222)	(19,022)	(12,784)	(16,182)	(16,074)	(14,919)	(14,632)
Minorities	11,901	3,658	15,025	12,672	11,584	14,317	(4,458)	1,953	8,499	7,677	6,285
Extraordinary items	10,112	(7,905)	(1,781)	21,859	(8,522)	2,065	26,475	(4,784)	4,507	9,051	6,258
<b>Net Profit</b>	<b>27,855</b>	<b>20,107</b>	<b>31,297</b>	<b>32,765</b>	<b>28,968</b>	<b>35,469</b>	<b>16,324</b>	<b>9,312</b>	<b>23,315</b>	<b>21,533</b>	<b>19,783</b>
EPS (Bt)	0.98	0.70	1.10	1.15	1.01	1.24	0.57	0.33	0.82	0.75	0.69
<b>Margins</b>											
Gross profit margin	11.5	9.9	15.4	9.2	12.9	11.4	6.4	10.7	10.6	8.4	10.6
Operating EBIT margin	8.6	7.1	12.7	5.9	10.9	9.5	2.0	6.4	7.9	5.7	7.2
Operating EBITDA margin	14.1	12.4	18.2	11.6	16.6	15.6	8.3	12.5	14.3	12.7	14.3
Net profit margin	3.7	2.6	3.9	4.1	3.7	4.3	2.1	1.3	3.3	3.2	3.1
<b>Growth</b>											
Revenue growth	(0.2)	(16.1)	(9.3)	1.2	3.4	5.6	(5.1)	(10.2)	(10.5)	(17.7)	(15.1)
Operating EBIT growth	(38.3)	(61.3)	131.3	128.9	31.2	41.5	(84.7)	(2.6)	(35.7)	(50.3)	200.5
Operating EBITDA growth	(25.4)	(47.4)	64.0	43.3	22.2	32.7	(56.6)	(3.8)	(23.3)	(33.0)	45.6
Net profit growth	12.4	(48.2)	252.7	75.5	4.0	76.4	(47.8)	(71.6)	(19.5)	(39.3)	21.2

Source: Company data, KGI Securities Research

## Balance Sheet

As of 31 Dec (Bt mn)	2023	2024	2025F	2026F	2027F
<b>Total Assets</b>	<b>3,460,462</b>	<b>3,438,784</b>	<b>3,385,695</b>	<b>3,386,246</b>	<b>3,382,634</b>
<b>Current Assets</b>	1,081,739	1,029,736	989,900	1,006,549	1,025,623
Cash & ST Investments	449,525	451,131	449,026	481,497	495,530
Inventories	210,999	187,333	180,646	171,468	173,318
Accounts Receivable	259,813	251,391	220,346	213,702	216,892
Others	161,401	139,882	139,882	139,882	139,882
<b>Non-current Assets</b>	<b>2,378,723</b>	<b>2,409,049</b>	<b>2,395,795</b>	<b>2,379,697</b>	<b>2,357,012</b>
LT Investments	224,997	267,235	271,235	271,235	271,235
Net fixed Assets	1,541,209	1,534,658	1,522,507	1,511,461	1,493,777
Others	612,517	607,156	602,053	597,001	592,000
<b>Total Liabilities</b>	<b>1,835,486</b>	<b>1,781,907</b>	<b>1,699,203</b>	<b>1,660,878</b>	<b>1,611,947</b>
<b>Current Liabilities</b>	588,710	569,088	514,235	527,191	516,675
Accounts Payable	243,385	240,193	210,207	199,527	201,679
ST Borrowings	209,987	200,656	175,790	199,426	186,757
Others	135,338	128,239	128,239	128,239	128,239
<b>Long-term Liabilities</b>	<b>1,246,777</b>	<b>1,212,819</b>	<b>1,184,968</b>	<b>1,133,687</b>	<b>1,095,271</b>
Long-term Debts	944,955	897,393	869,542	818,261	779,845
Others	301,821	315,426	315,426	315,426	315,426
<b>Shareholders' Equity</b>	<b>1,624,975</b>	<b>1,656,877</b>	<b>1,686,493</b>	<b>1,725,368</b>	<b>1,770,688</b>
Common Stock	28,563	28,563	28,563	28,563	28,563
Capital Surplus	588,846	588,476	588,476	588,476	588,476
Retained Earnings	1,007,566	1,039,838	1,069,453	1,108,329	1,153,649
Preferred Stock	0	0	0	0	0

Source: KGI Securities Research

## Key Ratios

Year to 31 Dec (Bt mn)	2023	2024	2025F	2026F	2027F
<b>Forecast Drivers</b>					
<b>Growth (% YoY)</b>					
Sales	(6.6)	(1.7)	(13.3)	(3.0)	1.5
OP	(13.8)	(16.3)	(14.1)	17.9	4.7
EBITDA	(7.8)	(7.0)	(7.3)	9.6	3.0
NP	22.9	(19.6)	(0.5)	10.3	6.5
EPS	22.9	(19.6)	(0.5)	10.3	6.5
<b>Profitability (%)</b>					
Gross Margin	11.5	10.4	10.6	12.5	12.8
Operating Margin	8.6	7.3	7.2	8.8	9.1
EBITDA Margin	14.1	13.3	14.2	16.1	16.3
Net Profit Margin	3.6	2.9	3.3	3.8	4.0
ROAA	3.3	2.6	2.6	2.9	3.1
ROAE	7.1	5.5	5.4	5.8	6.0
<b>Stability</b>					
Gross Debt/Equity (%)	71.1	66.3	62.0	59.0	54.6
Net Debt/Equity (%)	43.4	39.0	35.4	31.1	26.6
Interest Coverage (x)	5.3	4.4	4.3	4.8	5.1
Interest & ST Debt Coverage (x)	0.9	0.8	0.9	0.8	0.9
Cash Flow Interest Coverage (x)	8.4	8.0	6.5	6.9	7.3
Cash Flow/Interest & ST Debt (x)	1.5	1.5	1.3	1.2	1.3
Current Ratio (x)	1.8	1.8	1.9	1.9	2.0
Quick Ratio (x)	1.5	1.5	1.6	1.6	1.6
Net Debt (Bt mn)	705,417	646,918	596,306	536,190	471,072
<b>Per Share Data (Bt)</b>					
EPS	3.9	3.2	3.1	3.5	3.7
CFPS	13.4	13.1	9.8	10.1	10.2
BVPS	39.3	40.2	41.3	42.6	44.2
SPS	--	--	--	--	--
EBITDA/Share	15.5	14.4	13.4	14.6	15.1
DPS	2.0	2.1	2.1	2.1	2.1
<b>Activity</b>					
Asset Turnover (x)	0.9	0.9	0.8	0.8	0.8
Days Receivables	30.2	29.7	30.0	30.0	30.0
Days Inventory	27.7	24.7	27.5	27.5	27.5
Days Payable	8.7	8.7	8.8	8.8	8.8
Cash Cycle	49.1	45.7	48.7	48.7	48.7

Source: KGI Securities Research

## Profit & Loss

Year to 31 Dec (Bt mn)	2023	2024	2025F	2026F	2027F
Revenue	3,144,551	3,090,453	2,680,875	2,600,044	2,638,859
Cost of Goods Sold	(2,783,090)	(2,769,332)	(2,397,670)	(2,275,850)	(2,300,406)
<b>Gross Profit</b>	<b>361,461</b>	<b>321,121</b>	<b>283,204</b>	<b>324,195</b>	<b>338,453</b>
Operating Expenses	(132,293)	(143,182)	(129,645)	(132,134)	(136,363)
Other incomes	40,705	47,925	40,360	36,483	37,213
<b>Operating Profit</b>	<b>269,873</b>	<b>225,864</b>	<b>193,920</b>	<b>228,544</b>	<b>239,303</b>
Depreciation of fixed assets	173,065	185,918	187,777	189,655	191,551
<b>Operating EBITDA</b>	<b>442,938</b>	<b>411,782</b>	<b>381,697</b>	<b>418,199</b>	<b>430,854</b>
<b>Non-Operating Income</b>	0	0	0	0	0
Interest Income	0	0	0	0	0
Other Non-op Income	0	0	0	0	0
<b>Non-Operating Expenses</b>	<b>(58,577)</b>	<b>(53,753)</b>	<b>(43,052)</b>	<b>(41,973)</b>	<b>(39,818)</b>
Interest Expenses	(45,383)	(46,821)	(43,052)	(41,973)	(39,818)
Other Non-op Expenses	(13,194)	(6,933)	0	0	0
Net Investment Income/(Loss)	3,013	(6,668)	9,829	5,111	5,519
<b>Pre-tax Profit</b>	<b>214,309</b>	<b>165,443</b>	<b>160,697</b>	<b>191,683</b>	<b>205,004</b>
Current Taxation	(81,313)	(67,210)	(54,321)	(59,944)	(59,536)
Minorities	43,256	23,396	27,120	36,596	40,165
Extraordinary items	22,285	15,235	10,342	3,715	0
<b>Net Profit</b>	<b>112,024</b>	<b>90,072</b>	<b>89,598</b>	<b>98,858</b>	<b>105,302</b>
EPS (Bt)	3.92	3.15	3.14	3.46	3.69

Source: KGI Securities Research

## Cash Flow

Year to 31 Dec (Bt mn)	2023	2024	2025F	2026F	2027F
<b>Operating Cash Flow</b>	382,045	373,240	280,986	289,727	290,235
Net Profit	112,024	90,072	89,598	98,858	105,302
Depreciation & Amortization	173,065	185,918	187,777	189,655	191,551
Change in Working Capital	(16,391)	28,897	7,744	5,142	(2,887)
Others	113,348	68,353	(4,134)	(3,927)	(3,731)
<b>Investment Cash Flow</b>	(161,245)	(188,763)	(174,524)	(173,556)	(168,866)
Net CAPEX	(163,734)	(160,460)	(175,627)	(178,608)	(173,868)
Change in LT Investment	0	0	0	0	0
Change in Other Assets	2,490	(28,303)	1,103	5,052	5,002
<b>Free Cash Flow</b>	218,311	212,780	105,359	111,119	116,367
<b>Financing Cash Flow</b>	(143,721)	(196,472)	(108,566)	(83,700)	(107,336)
Change in Share Capital	0	0	0	0	0
Net Change in Debt	(31,724)	(62,440)	(48,584)	(23,718)	(47,354)
Change in Other LT Liab.	(111,996)	(134,032)	(59,982)	(59,982)	(59,982)
<b>Net Cash Flow</b>	<b>77,080</b>	<b>(11,995)</b>	<b>(2,104)</b>	<b>32,471</b>	<b>14,033</b>

Source: KGI Securities Research

## Rates of Return on Invested Capital

Year	1 - $\frac{COGS}{Revenue}$	+ $\frac{Depreciation}{Revenue}$	+ $\frac{Operating Exp.}{Revenue}$	= $\frac{Operating Margin}{Revenue}$		
2023	83.0%		5.5%	4.2%	7.3%	
2024	83.6%		6.0%	4.6%	5.8%	
2025F	82.4%		7.0%	4.8%	5.7%	
2026F	80.2%		7.3%	5.1%	7.4%	
2027F	79.9%		7.3%	5.2%	7.7%	
Year	1/ $\frac{Working Capital}{Revenue}$	+ $\frac{Net PPE}{Revenue}$	+ $\frac{Other Assets}{Revenue}$	= $\frac{Capital Turnover}{Revenue}$		
2023	0.16	0.49	0.19	1.19		
2024	0.15	0.50	0.20	1.19		
2025F	0.18	0.57	0.22	1.03		
2026F	0.18	0.58	0.23	1.00		
2027F	0.19	0.57	0.22	1.02		
Year	Operating Margin	$\times$	Capital Turnover	$\times$	= $\frac{Cash Tax Rate}{Revenue}$	= $\frac{After-tax Return on Inv. Capital}{Revenue}$
2023	7.3%		1.2		57.9	5.0
2024	5.8%		1.2		57.3	3.9
2025F	5.7%		1.0		62.3	3.7
2026F	7.4%		1.0		62.3	4.6
2027F	7.7%		1.0		63.9	5.0

Source: KGI Securities Research

## PTT Pcl - Recommendation &amp; target price history



Source: KGI Securities Research

## Company's ESG details

### Environment

- PTT is dedicated to controlling, preventing, and minimizing environmental impacts through the careful selection of technology and engineering design. The Zero Liquid Discharge (ZLD) technology will be installed at Natural Gas Separation Plant Unit 7. This technology recycles treated wastewater, ensuring that no discharge is released from the system, significantly reducing water usage compared to Natural Gas Separation Plant Unit 1.
- The PTT Innovation Institute has developed a Greywater Recycle prototype that repurposes used water from handwashing for treatment and reuse in toilets. The pilot project was successfully implemented at PTT's headquarters. This innovative system can recycle up to 90 liters of water per hour, with water quality meeting the US EPA standards. Since its introduction in 2023, the system has helped reduce municipal water consumption by approximately 20 cubic meters annually in office buildings.
- PTT manages PM2.5 levels indoors by developing an innovative PM2.5 and airborne pathogen treatment system (PTT Innovative Hybrid Treatment Prototype), which won the "Outstanding State Enterprise Award 2021" for Creativity and Innovation. The system is installed at PTT's headquarters and other locations to reduce indoor PM2.5 concentrations. Additionally, air quality is continuously monitored through the "HAWA" (PM Alert) air quality monitoring system, which utilizes laser scattering technology.
- PTT has consistently collected and recorded data on expenditures, revenues, and investments related to environmental management. In 2024, the scope of this data collection was expanded to include six subsidiaries within PTT Group: PTT Exploration and Production Public Company Limited (PTTEP), PTT Global Chemical Public Company Limited (GC), Thai Oil Public Company Limited (TOP), IRPC Public Company Limited (IRPC), PTT Oil and Retail Business Public Company Limited (OR), and Global Power Synergy Public Company Limited (GPSC). Moreover, PTT has developed a tool to assess the Environmental Return on Investment (EROI), which measures the financial effectiveness of environmental investments in clearer, more tangible terms.

### Social

- PTT strongly opposes any form of discrimination, segregation, exclusion, harassment (sexual and non-sexual), or gender-based restrictions, whether direct or indirect, and without justification. This applies regardless of gender, sexual orientation, ethnicity, religion, language, age, disability, or health status. PTT is committed to maintaining and promoting diversity within its workforce, recognizing the value of exchanging ideas, cultures, perspectives, and experiences. This diversity fosters creativity and innovation, benefiting both the organization and society at large.
- PTT encourages its employees to join the state enterprise labor union of PTT Public Company Limited ("PTT Labor Union"), which was established to foster positive relationships between employees and employers, as well as among the employees themselves. The union is dedicated to addressing employee grievances, protecting labor conditions, and ensuring efficiency while safeguarding the interests of the state enterprise. It also provides welfare benefits to its members.
- To reduce road accidents in Thailand, PTT has forged partnerships with key stakeholders from both the public and private sectors, including the Department of Disaster Prevention and Mitigation (DDPM), the Department of Land Transport, the Highway Department, Road Accident Victims Protection Co., Ltd., the Provincial Public Health Office, PTT Group. Together, they have launched the "Safe Driving for a Better Life" initiative in Rayong Province, aimed at promoting road safety awareness and instilling a sense of responsibility among individuals, road users, and the local community. In 2024, PTT, in collaboration with both public and private sector partners in Rayong, organized a series of activities for schools and communities in the area.

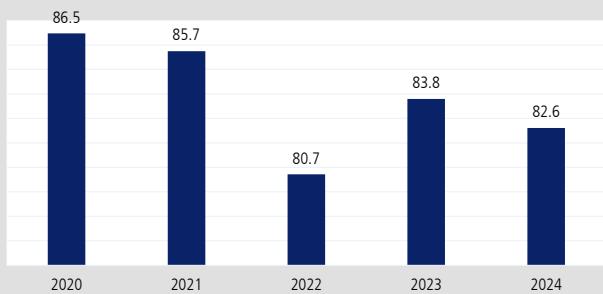
### Governance

- PTT maintains annual "Excellent" CG scoring From Thai Institute of Directors Association (IOD).

### Climate Management (Subset of Environment)

- PTT targets to achieve Carbon Neutrality by 2040 and Net Zero Emissions by 2050 under the boundary of PTT owned-operations, including wholly owned subsidiaries of PTT.
- PTT and PTT Group also sets to reduce greenhouse gas emissions (Scope 1 and Scope 2 covering domestic and international operations) by 15% in 2030 compared to the base year 2020.
- From 2024 to 2028, PTT Group has allocated a 5-year investment plan with a total budget of approximately Bt1.09trn. This plan is designed to ensure energy security, maintain competitiveness, and drive business growth for the Group. It also aims to capitalize on emerging opportunities in new energy sectors, particularly those related to Carbon Capture and Storage (CCS) and hydrogen.
- PTT released greenhouse gas (GHG) emissions (Scope 1 & 2) of 41.45mn tons of CO<sub>2</sub> equivalent in 2024, increasing YoY from 41.2mn tons of CO<sub>2</sub> equivalent in 2023, due to higher utilization rate of Gas Separation Plant (GSP).

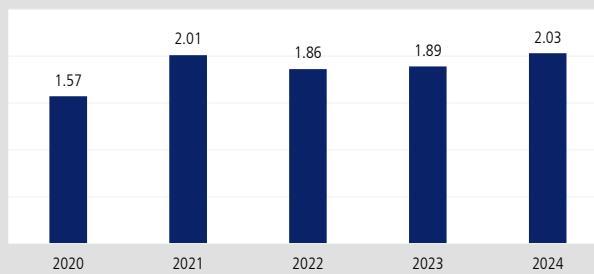
Source: Company data, KGI Securities Research

**Total GHG emissions**GHG emissions, mn tons of CO<sub>2</sub>e

Source: Company data, SETSMART, KGI Securities Research

**Total water consumption**

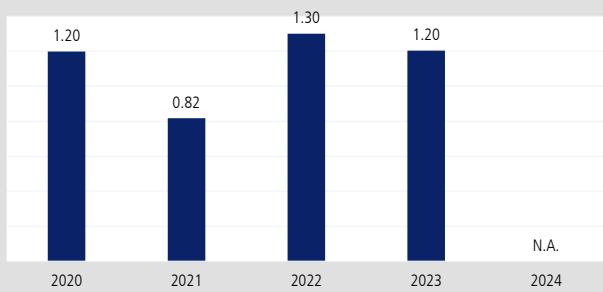
Water consumption, mn cubic meters



Source: Company data, SETSMART, KGI Securities Research

**Employee turnover**

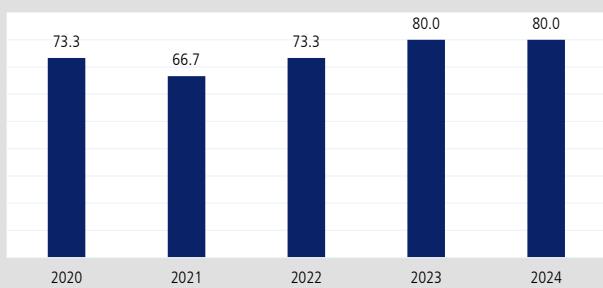
Employee turnover, percent



Source: Company data, SETSMART, KGI Securities Research

**Proportion of independent directors**

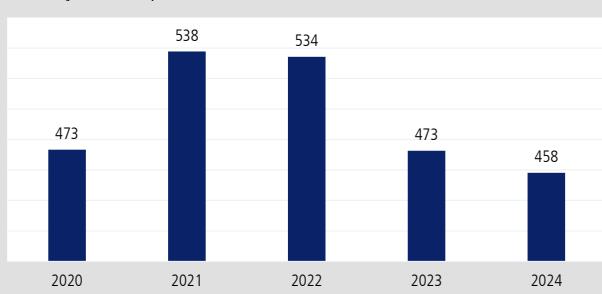
Independent directors, percent



Source: Company data, SETSMART, KGI Securities Research

**Total electricity consumption**

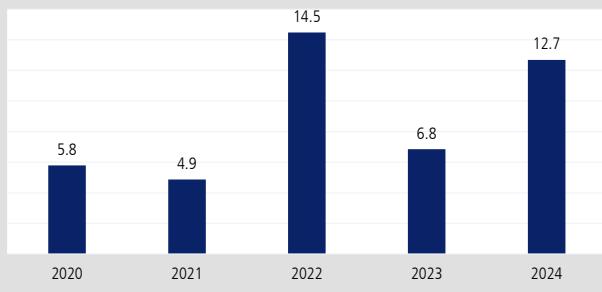
Electricity consumption, GWh



Source: Company data, SETSMART, KGI Securities Research

**Total waste**

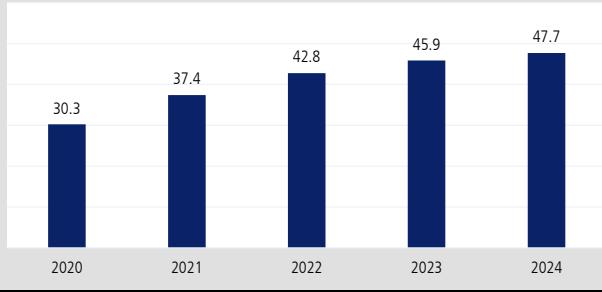
Waste generated, '000 tons



Source: Company data, SETSMART, KGI Securities Research

**Average employee training hours**

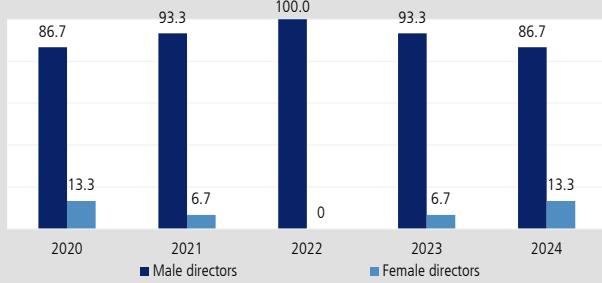
Average employee training hour, hours per person per year



Source: Company data, SETSMART, KGI Securities Research

**Gender diversification of directors**

Gender diversification, percent



Source: Company data, SETSMART, KGI Securities Research

## SET ESG Ratings

Stock	Company name	SET ESG Ratings	Stock	Company name	SET ESG Ratings
AAV	ASIA AVIATION	AAA	JMT	JMT NETWORK SERVICES	A
ADVANC	ADVANCED INFO SERVICE	AAA	KBANK	KASIKORN BANK	AAA
AEONTS	AEON THANA SINSAP (THAILAND)	A	KCE	KCE ELECTRONICS	AA
AMATA	AMATA CORPORATION	AAA	KKP	KIATNAKIN PHATRA BANK	AAA
AOT	AIRPORTS OF THAILAND	AA	KTB	KRUNG THAI BANK	AAA
AP	AP (THAILAND)	AA	KTC	KRUNGTHAI CARD	AAA
BAM	BANGKOK COMMERCIAL ASSET MANAGEMENT	AAA	LH	LAND AND HOUSES	AAA
BANPU	BANPU	AAA	MAJOR	MAJOR CINEPLEX GROUP	AAA
BBGI	BBGI	AAA	MINT	MINOR INTERNATIONAL	AA
BBL	BANGKOK BANK	AAA	MTC	MUANGTHAI CAPITAL	AA
BCH	BANGKOK CHAIN HOSPITAL	AA	NEO	NEO CORPORATE	A
BDMS	BANGKOK DUSIT MEDICAL SERVICES	AAA	OR	PTT OIL AND RETAIL BUSINESS	AAA
BEM	BANGKOK EXPRESSWAY AND METRO	AAA	ORI	ORIGIN PROPERTY	AAA
BGRIM	B.GRIMM POWER	AAA	OSP	OSOTSPA	AAA
BH	BUMRUNGAD HOSPITAL	A	PLANB	PLAN B MEDIA	AAA
BPP	BANPU POWER	AAA	PSH	PRUKSA HOLDING	AAA
BTG	BETAGRO	AAA	PTG	PTG ENERGY	AAA
BTS	BTS GROUP HOLDINGS	AA	PTT	PTT	AAA
CBG	CARABAO GROUP	AA	PTTEP	PTT EXPLORATION AND PRODUCTION	AAA
CENTEL	CENTRAL PLAZA HOTEL	AAA	PTTGC	PTT GLOBAL CHEMICAL	AAA
CHG	CHULARAT HOSPITAL	A	RATCH	RATCH GROUP	AAA
CK	CH. KARNCHANG	AA	RBF	R&B FOOD SUPPLY	AA
CKP	CK POWER	AAA	SAK	SAKSIAM LEASING	A
COM7	COM7	AA	SAPPE	SAPPE	A
CPALL	CP ALL	AAA	SAWAD	SRISAWAD CORPORATION	AA
CPAXT	CP AXTRA	AAA**	SCB	SCB X	AAA
CPF	CHAROEN POKPHAND FOODS	AAA	SCGP	SCG PACKAGING	AAA
CPN	CENTRAL PATTANA	AAA	SHR	S HOTELS AND RESORTS	AA
CRC	CENTRAL RETAIL CORPORATION	AAA	SMPC	SAHAMITR PRESSURE CONTAINER	AA
EGCO	ELECTRICITY GENERATING	AA	SPALI	SUPALAI	AA
ERW	THE ERAWAN GROUP	A	SPRC	STAR PETROLEUM REFINING	BBB
GFPT	GFPT	AA	STECON	STECON GROUP	AAA
GLOBAL	SIAM GLOBAL HOUSE	AAA	SUN	SUNSWEET	BBB
GPSC	GLOBAL POWER SYNERGY	AAA	SYNEX	SYNNEK (THAILAND)	AA
GULF	GULF ENERGY DEVELOPMENT	AA	TCAP	THANACHART CAPITAL	AA
HANA	HANA MICROELECTRONICS	AAA	TFG	THAIFOODS GROUP	AA
HMPRO	HOME PRODUCT CENTER	AAA	TISCO	TISCO FINANCIAL GROUP	AAA
HUMAN	HUMANICA	A	TOP	THAI OIL	AAA
ITC	I-TAIL CORPORATION	A	TTB	TMBTHANACHART BANK	AAA
IVL	INDORAMA VENTURES	AAA	TU	THAI UNION GROUP	AA
JMART	JAYMART GROUP HOLDINGS	AA	WHA	WHA CORPORATION	AAA

\*\*SET ESG Ratings users are advised to review additional information regarding the company's environmental, social, or governance factors.

Source: [www.setsustainability.com](http://www.setsustainability.com)

**Disclaimer:** The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by the relevant institution as disclosed by the Office of the Securities and Exchange Commission, is made in order to comply with the policy and sustainable development plan for the listed companies. The relevant institution 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 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, KGI Securities (Thailand) Public Company Limited (KGI) does not confirm, verify, or certify the accuracy and completeness of the assessment result.

## Corporate Governance Report of Thai Listed Companies



### Companies with Excellent CG Scoring

Stock	Company name	Stock	Company name	Stock	Company name
AAV	ASIA AVIATION	CPF	CHAROEN POKPHAND FOODS	PLANB	PLAN B MEDIA
ADVANC	ADVANCED INFO SERVICE	CPN	CENTRAL PATTANA	PSH	PRUKSA HOLDING
AMA	AMA MARINE	CRC	CENTRAL RETAIL CORPORATION	PTT	PTT
AMATA	AMATA CORPORATION	DELTA	DELTA ELECTRONICS (THAILAND)	PTTEP	PTT EXPLORATION AND PRODUCTION
AOT	AIRPORTS OF THAILAND	DOHOMI	DOHOME	PTTGC	PTT GLOBAL CHEMICAL
AP	AP (THAILAND)	EGCO	ELECTRICITY GENERATING	QH	QUALITY HOUSES
BAFS	BANGKOK AVIATION FUEL SERVICES PCL.	ERW	THE ERAWAN GROUP	RATCH	RATCH GROUP
BAM	BANGKOK COMMERCIAL ASSET MANAGEMENT	GFPT	GFPT	RBF	R&B FOOD SUPPLY
BANPU	BANPU	GLOBAL	SIAM GLOBAL HOUSE	SAK	SAKSIM LEASING
BBGI	BBGI	GPSC	GLOBAL POWER SYNERGY	SAV	SAMART AVIATION SOLUTIONS
BBL	BANGKOK BANK	GULF	GULF ENERGY DEVELOPMENT	SAWAD	SRISAWAD CORPORATION
BCH	BANGKOK CHAIN HOSPITAL	HANA	HANA MICROELECTRONICS	SCB	SCB X
BCP	BANGCHAK CORPORATION	HMPRO	HOME PRODUCT CENTER	SCGP	SCG PACKAGING
BCPG	BCPG	IRPC	IRPC	SHR	S HOTELS AND RESORTS
BDMS	BANGKOK DUSIT MEDICAL SERVICES	ITC	I-TAIL CORPORATION	SMPC	SAHAMITR PRESSURE CONTAINER
BEC	BEC WORLD	IVL	INDORAMA VENTURES	SPALI	SUPALAI
BEM	BANGKOK EXPRESSWAY AND METRO	KBANK	KASIKORN BANK	SPRC	STAR PETROLEUM REFINING
BGRIM	B.GRIMM POWER	KCE	KCE ELECTRONICS	SUN	SUNSWEET
BPP	BANPU POWER	KKP	KIATNAKIN PHATRA BANK	SVI	SVI
BSRC	BANGCHAK SRIRACHA	KTB	KRUNG THAI BANK	SYNEX	SYNNEK (THAILAND)
BTG	BETAGRO	KTC	KRUNGTHAI CARD	TCAP	THANACHART CAPITAL
BTS	BTS GROUP HOLDINGS	LH	LAND AND HOUSES	TFG	THAIFOODS GROUP
CBG	CARABAO GROUP	LPN	L.P.N. DEVELOPMENT	TISCO	TISCO FINANCIAL GROUP
CENTEL	CENTRAL PLAZA HOTEL	MAJOR	MAJOR CINEPLEX GROUP	TOP	THAI OIL
CK	CH. KARNCHANG	MINT	MINOR INTERNATIONAL	TRUE	TRUE CORPORATION
CKP	CK POWER	MTC	MUANGTHAI CAPITAL	TTB	TMBTHANACHART BANK
COM7	COM7	OR	PTT OIL AND RETAIL BUSINESS	TU	THAI UNION GROUP
CPALL	CP ALL	ORI	ORIGIN PROPERTY	WHA	WHA CORPORATION
CPAXT	CP AXTRA	OSP	OSOTSPA		



### Companies with Very Good CG Scoring

Stock	Company name	Stock	Company name	Stock	Company name
AEONTS	AEON THANA SINSAP (THAILAND)	HUMAN	HUMANICA	SAPPE	SAPPE
BH	BUMRUNGAD HOSPITAL	JMART	JAYMART GROUP HOLDINGS	TKN	TAOKAENOI FOOD & MARKETING



### Companies with Good CG Scoring

Stock	Company name	Stock	Company name	Stock	Company name
EKH	EKACHAI MEDICAL CARE	SISB	SISB		
JMT	JMT NETWORK SERVICES	TNP	THANAPIRIYA		

### Companies classified Not in the three highest score groups

Stock	Company name	Stock	Company name	Stock	Company name
AU	AFTER YOU	PLT	PILATUS MARINE	TIDLOR	NGERN TID LOR
CHG	CHULARAT HOSPITAL	PTG	PTG ENERGY		
NEO	NEO CORPORATE	SPA	SIAM WELLNESS GROUP		

Source: [www.thai-iod.com](http://www.thai-iod.com)

**Disclaimer:** The disclosure of the survey result 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 assessment 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 result may be changed after that date or when there is any change to the relevant information. Nevertheless, KGI Securities (Thailand) Public Company Limited (KGI) does not confirm, verify, or certify the accuracy and completeness of such survey result.

## Anti-corruption Progress Indicator

### Certified

Stock	Company name	Stock	Company name	Stock	Company name
ADVANC	ADVANCED INFO SERVICE	DOHOME	DOHOME	PTG	PTG ENERGY
AMA	AMA MARINE	EGCO	ELECTRICITY GENERATING	PTT	PTT
AMATA	AMATA CORPORATION	ERW	THE ERAWAN GROUP	PTTEP	PTT EXPLORATION AND PRODUCTION
AP	AP (THAILAND)	GFPT	GFPT	PTTGC	PTT GLOBAL CHEMICAL
BAFS	BANGKOK AVIATION FUEL SERVICES PCL.	GLOBAL	SIAM GLOBAL HOUSE	QH	QUALITY HOUSES
BAM	BANGKOK COMMERCIAL ASSET MANAGEMENT	GPSC	GLOBAL POWER SYNERGY	RATCH	RATCH GROUP
BANPU	BANPU	GULF	GULF ENERGY DEVELOPMENT	RBF	R&B FOOD SUPPLY
BBGI	BBGI	HANA	HANA MICROELECTRONICS	SAK	SAKSIM LEASING
BBL	BANGKOK BANK	HMPRO	HOME PRODUCT CENTER	SAPPE	SAPPE
BCH	BANGKOK CHAIN HOSPITAL	IRPC	IRPC	SCB	SCB X
BCP	BANGCHAK CORPORATION	IVL	INDORAMA VENTURES	SCGP	SCG PACKAGING
BCPG	BCPG	KBANK	KASIKORN BANK	SMPC	SAHAMITR PRESSURE CONTAINER
BEC	BEC WORLD	KCE	KCE ELECTRONICS	SPALI	SUPALAI
BGRIM	B.GRIMM POWER	KKP	KIATNAKIN PHATRA BANK	SPRC	STAR PETROLEUM REFINING
BPP	BANPU POWER	KTB	KRUNG THAI BANK	SVI	SVI
BTG	BETAGRO	KTC	KRUNGTHAI CARD	TCAP	THANACHART CAPITAL
BTS	BTS GROUP HOLDINGS	LH	LAND AND HOUSES	TFG	THAIFOODS GROUP
CBG	CARABAO GROUP	LPN	L.P.N. DEVELOPMENT	TIDLOR	NGERN TID LOR
CENTEL	CENTRAL PLAZA HOTEL	MAJOR	MAJOR CINEPLEX GROUP	TISCO	TISCO FINANCIAL GROUP
COM7	COM7	MINT	MINOR INTERNATIONAL	TKN	TAOKAENOI FOOD & MARKETING
CPALL	CP ALL	MTC	MUANGTHAI CAPITAL	TNP	THANAPIRIYA
CPAXT	CP AXTRA	OR	PTT OIL AND RETAIL BUSINESS	TOP	THAI OIL
CPF	CHAROEN POKPHAND FOODS	ORI	ORIGIN PROPERTY	TRUE	TRUE CORPORATION
CPN	CENTRAL PATTANA	OSP	OSOTSPA	TTB	TMBTHANACHART BANK
CRC	CENTRAL RETAIL CORPORATION	PLANB	PLAN B MEDIA	TU	THAI UNION GROUP
DELTA	DELTA ELECTRONICS (THAILAND)	PSH	PRUKSA HOLDING	WHA	WHA CORPORATION

### Declared

Stock	Company name	Stock	Company name	Stock	Company name
CHG	CHULARAT HOSPITAL	ITC	I-TAIL CORPORATION	SAWAD	SRISAWAD CORPORATION
HUMAN	HUMANICA	JMART	JAYMART GROUP HOLDINGS	SHR	S HOTELS AND RESORTS

### Non-participation

Stock	Company name	Stock	Company name	Stock	Company name
AAV	ASIA AVIATION	BSRC	BANGCHAK SRIRACHA	SAV	SAMART AVIATION SOLUTIONS
AEONTS	AEON THANA SINSAP (THAILAND)	CK	CH. KARNCHANG	SISB	SISB
AOT	AIRPORTS OF THAILAND	CKP	CK POWER	SPA	SIAM WELLNESS GROUP
AU	AFTER YOU	EKH	EKACHAI MEDICAL CARE	SUN	SUNSWEET
BDMS	BANGKOK DUSIT MEDICAL SERVICES	JMT	JMT NETWORK SERVICES	SYNEX	SYNTEX (THAILAND)
BEM	BANGKOK EXPRESSWAY AND METRO	NEO	NEO CORPORATE		
BH	BUMRUNGRAD HOSPITAL	PLT	PILATUS MARINE		

Source: [www.cgthailand.org](http://www.cgthailand.org)

**Disclaimer:** The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by the relevant institution as disclosed by the Office of the Securities and Exchange Commission, is made in order to comply with the policy and sustainable development plan for the listed companies. The relevant institution 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 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, KGI Securities (Thailand) Public Company Limited (KGI) does not confirm, verify, or certify the accuracy and completeness of the assessment result.

**KGI Locations**

<b>China</b> Shanghai	Room 2703B-2704, Tower A ,Shanghai Dawning Centre,500 Hongbaoshi Road Shanghai, PRC 201103
Shenzhen	Room 24D1, 24/F, A Unit, Zhen Ye Building,2014 Bao'annan Road, Shenzhen, PRC 518008
<b>Taiwan</b> Taipei	700 Mingshui Road, Taipei, Taiwan Telephone 886.2.2181.8888 • Facsimile 886.2.8501.1691
<b>Hong Kong</b>	41/F Central Plaza, 18 Harbour Road, Wanchai, Hong Kong Telephone 852.2878.6888 Facsimile 852.2878.6800
<b>Thailand</b> Bangkok	195 One Bangkok Tower 4 18th - 19th floors Witthayu Road Lumpini, Pathumwan, Bangkok 10330, Thailand Telephone 66.2658.8888 Facsimile 66.2658.8014
<b>Singapore</b>	4 Shenton Way #13-01 SGX Centre 2 Singapore 068807 Telephone 65.6202.1188 Facsimile 65.6534.4826

**KGI's Ratings**

	<b>Rating</b>	<b>Definition</b>
	Outperform (OP)	The stock's excess return over the next twelve months is ranked in the top 40% of KGI's coverage universe in the related market (e.g. Taiwan)..
	Neutral (N)	The stock's excess return over the next twelve months is ranked in the range between the top 40% and the bottom 40% of KGI's coverage universe in the related market (e.g. Taiwan)
	Under perform (U)	The stock's excess return over the next twelve months is ranked in the bottom 40% of KGI's coverage universe in the related market (e.g. Taiwan).
	Not Rated (NR)	The stock is not rated by KGI.
	Restricted (R)	KGI policy and/or applicable law regulations preclude certain types of communications, including an investment recommendation, during the course of KGI's engagement in an investment banking transaction and in certain other circumstances. Excess return = 12M target price/current price-
Note		When an analyst publishes a new report on a covered stock, we rank the stock's excess return with those of other stocks in KGI's coverage universe in the related market. We will assign a rating based on its ranking. If an analyst does not publish a new report on a covered stock, its rating will not be changed automatically.

**Disclaimer**

KGI Securities (Thailand) Plc. ( "The Company" ) disclaims all warranties with regards to all information contained herein. In no event shall the Company be liable for any direct, indirect or any damages whatsoever resulting from loss of income or profits, arising by utilization and reliance on the information herein. All information hereunder does not constitute a solicitation to buy or sell any securities but constitutes our sole judgment as of this date and are subject to change without notice.