

SET ESG Rating of AAA

Neutral · Downgraded	
Price as of 9 Dec 2024	126.50
12M target price (Bt/shr)	142.00
Unchanged/Revised up(down)(%)	(13.4)
Upside/downside (%)	12.3

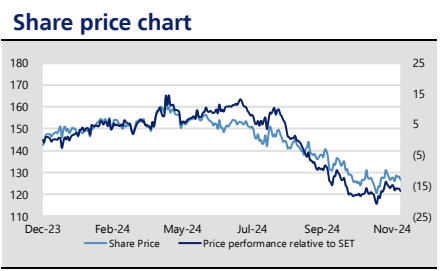
Key messages
 เราปรับลดประมาณการกำไรปี 2570F ลง 10% เหลือ 4.72 หมื่นล้านบาท และปี 2571F ลง 16% เหลือ 4.72 หมื่นล้านบาท จากการที่เราปรับลดสมมติฐานราคาน้ำมันดิบดูไบระยะยาวจากเดิม US\$70/bbl เหลือ US\$65/bbl เนื่องจาก i) ต้นทุนการผลิตที่สหรัฐลดลง และ ii) ผลกระทบที่อาจเกิดขึ้นจากการที่ Trump กลับมาดำรงตำแหน่งประธานาธิบดีอีกครั้ง นอกจากนี้ เราซึ่งปรับลดราคาเป้าหมาย DCF ปี 2568F ลงเหลือ 142.00 บาท จากเดิม 164.00 บาท โดยใช้ WACC ที่ 8.8% และ terminal growth ที่ 1.0% เพื่อสะท้อนถึงการปรับลดสมมติฐานราคาน้ำมันดิบดูไบระยะยาวเหลือ US\$65/bbl นอกจากนี้ เราซึ่งปรับลดคำแนะนำหุ้น PTTEP จากซื้อเป็นถือ เนื่องจากราคาน้ำมันดิบดูไบมีแนวโน้มลดลงมาอยู่ที่ US\$75/70/bbl ในปี 2568F/2569F ในขณะที่ราคาน้ำมันดิบดูไบใน 4Q67F จะลดลง QoQ เนื่องจาก i) ราคาน้ำมันดิบดูไบใน 4QTD67 ลดลง 6% QoQ เหลือ US\$73/bbl และ ii) ต้นทุนต่อหน่วยมักจะสูงในไตรมาสสุดท้ายของปี

Trading data

Mkt cap (Btbn/US\$bn)	502/14.8		
Outstanding shares (mn)	3,970		
Foreign ownership (mn)	414		
3M avg. daily trading (mn)	12.0		
52-week trading range (Bt)	120.50 – 164.00		
Performance (%)	3M	6M	12M
Absolute	(9.6)	(17.9)	(12.5)
Relative	(10.8)	(25.3)	(17.0)


Quarterly EPS

Bt	1Q	2Q	3Q	4Q
2022	2.65	5.19	6.09	3.93
2023	4.86	5.30	4.56	4.61
2024	4.71	6.04	4.50	



Source: SET
 Kaweevit Thawilwithayanon, CISA
 66.2658.8888 Ext. 8847
 kaweevit@kgi.co.th

PTT Exploration and Production (PTTEP.BK/PTTEP TB)*



ต้นทุนการผลิตน้ำมันดิบสหรัฐที่ลดลงส่งผลกระทบต่อตลาดโลก

Event
 ปรับลดราคาเป้าหมายและปรับลดคำแนะนำ

Impact
 เราปรับลดสมมติฐานราคาน้ำมันดิบดูไบระยะยาวเหลือ US\$65/bbl จากเดิม US\$70/bbl เราปรับลดประมาณการกำไรปี 2570F ลง 10% เหลือ 4.72 หมื่นล้านบาท และปี 2571F ลง 16% เหลือ 4.72 หมื่นล้านบาท จากการที่เราปรับลดสมมติฐานราคาน้ำมันดิบดูไบระยะยาวจากเดิม US\$70/bbl เหลือ US\$65/bbl เนื่องจาก i) ต้นทุนการผลิตที่สหรัฐลดลง และ ii) ผลกระทบที่อาจเกิดขึ้นจากการที่ Trump กลับมาดำรงตำแหน่งประธานาธิบดีอีกครั้ง โดยในช่วงสิบปีที่ผ่านมา ความก้าวหน้าทางเทคโนโลยี, ประสิทธิภาพในการดำเนินงาน และการแข่งขันที่เพิ่มขึ้นทำให้ต้นทุนการผลิตน้ำมันดิบของสหรัฐลดลง โดยเฉพาะในภูมิภาคที่ผลิต shale อย่างเช่น Permian Basin ทั้งนี้ดังที่แสดงใน Figure 2 ยอดผลิตน้ำมันดิบของสหรัฐทำสถิติสูงเป็นประวัติการณ์ที่ 13.5 MBD แมวจำนวนแท่นขุดเจาะน้ำมันของสหรัฐมีแนวโน้มลดลง นอกจากนี้ ผลสำรวจที่เผยแพร่โดย Statista Research Department เมื่อวันที่ 30 เมษายน 2567 ยังเปิดเผยว่าผู้ผลิตน้ำมันในแถบ Permian ต้องการราคาน้ำมันดิบ WTI อย่างน้อย US\$62/bbl ถึงจะสามารถขุดหลุมใหม่แบบมีกำไรได้ ในขณะที่เดียวกันตลาดคาดการณ์นโยบายพลังงานของ Trump จะทำให้การผลิตน้ำมันของสหรัฐเพิ่มขึ้น แต่อย่างไรก็ตาม เราเชื่อว่ายังคงใช้เวลาในการดำเนินนโยบายใหม่อีกสักระยะ และกว่าที่จะเริ่มผลิตน้ำมันดิบได้หลังจากที่บริษัทตัดสินใจเริ่มลงทุนขุดหลุมใหม่ นอกจากนี้ เรายังคงมองว่าราคาน้ำมันดิบดูไบมีแนวโน้มลดลงมาอยู่ที่ US\$75/70/bbl ในปี 2568F/2569F ลดลงจาก US\$81/bbl ในปี 2567F

คาดว่ากำไรปี 2568F จะลดลง 13% YoY
 เรายังคงประมาณการกำไรปี 2568F ของ PTTEP เอาไว้ที่ 6.56 หมื่นล้านบาท ลดลง 13% YoY เนื่องจากราคาน้ำมันดิบลดลง โดยเราคาดว่าราคาน้ำมันดิบดูไบในปีหน้าจะลดลง 7% YoY เหลือ US\$75/bbl เพราะถูกกดดันจากอุปสงค์ที่อ่อนแอในตลาดโลก และอุปทานน้ำมันดิบที่เพิ่มขึ้นจากประเทศที่อยู่นอกกลุ่ม OPEC+ ทั้งนี้ตลาดคาดว่าอุปทานน้ำมันดิบจะเพิ่มขึ้น 1.4 MBD จากประเทศนอกกลุ่ม OPEC+ โดยเฉพาะสหรัฐ, แคนาดา, กายอานา และบราซิล ในขณะที่เดียวกันตลาดคาดว่าอุปสงค์น้ำมันดิบในตลาดโลกจะเพิ่มขึ้น 1.2 MBD ในปีหน้า แต่อย่างไรก็ตาม เราคาดว่าปริมาณขุดเจาะของ PTTEP จะเพิ่มขึ้นเล็กน้อย YoY เป็น 523 KBOED ในปี 2568F เพราะจะเป็นปีแรกที่รับรู้กำลังการผลิต 800mmscfd จากโครงการเอราวันเต็มปี

Valuation & Action
 เราปรับลดราคาเป้าหมาย DCF ปี 2568F ลงเหลือ 142.00 บาท จากเดิม 164.00 บาท โดยใช้ WACC ที่ 8.8% และ terminal growth ที่ 1.0% เพื่อสะท้อนถึงการปรับลดสมมติฐานราคาน้ำมันดิบดูไบระยะยาวเหลือ US\$65/bbl นอกจากนี้ เราซึ่งปรับลดคำแนะนำหุ้น PTTEP จากซื้อเป็นถือ เนื่องจากราคาน้ำมันดิบดูไบมีแนวโน้มลดลงมาอยู่ที่ US\$75/70/bbl ในปี 2568F/2569F ในขณะที่ราคาน้ำมันดิบดูไบใน 4Q67F จะลดลง QoQ เนื่องจาก i) ราคาน้ำมันดิบดูไบใน 4QTD67 ลดลง 6% QoQ เหลือ US\$73/bbl และ ii) ต้นทุนต่อหน่วยมักจะสูงในไตรมาสสุดท้ายของปี

Risks
 ความผันผวนของราคาน้ำมันดิบและก๊าซ

Key financials and valuations

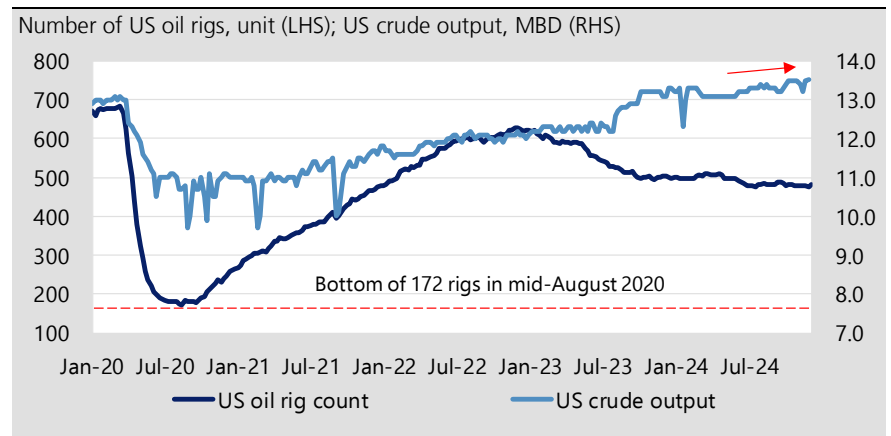
	Dec-22A	Dec-23A	Dec-24F	Dec-25F	Dec-26F
Revenue (Bt mn)	331,350	300,694	307,992	275,251	267,381
Gross profit (Bt mn)	182,401	157,768	148,998	126,270	115,255
EBIT (Bt mn)	169,000	145,820	136,111	113,589	101,740
Net profit (Bt mn)	70,901	76,706	75,530	65,568	56,282
EPS (Bt)	17.86	19.32	19.03	16.52	14.18
DPS (Bt)	9.25	9.50	10.46	9.08	7.80
EPS growth (%)	82.4	8.2	(1.5)	(13.2)	(14.2)
P/E (x)	9.9	7.7	6.6	7.7	8.9
P/B (x)	1.5	1.2	0.9	0.9	0.9
EV/EBITDA (x)	2.9	2.6	2.3	2.8	3.1
Net Debt to Equity (x)	0.0	(0.0)	0.0	0.1	0.1
Dividend Yield (%)	5.2	6.4	8.3	7.2	6.2
Return on Avg. Equity (%)	16.1	15.9	14.6	12.0	9.8

Source: Company data, KGI Securities Research

Figure 1: Changes in key assumptions for 2027F-2028F

Our assumptions	2027F			2028F		
	Previous	Revised	Change (%)	Previous	Revised	Change (%)
Benchmark						
Dubai crude price (US\$/bbl)	70	65	(7.1)	70	65	(7.1)
Selling Price						
ASP (US\$/BOE)	40.3	38.9	(3.5)	40.2	38.0	(5.6)
- Liquid (US\$/bbl)	67.3	62.5	(7.1)	67.3	62.5	(7.1)
- Gas (US\$/mmbtu)	5.1	5.0	(0.5)	5.2	5.0	(4.4)
Income statement						
Earnings (Bt mn)	52,223	47,211	(9.6)	56,006	47,237	(15.7)

Source: Company data, KGI Securities Research

Figure 2: US crude production has reached an all-time high of 13.5 MBD, despite a downward trend in US oil rig counts.


Source: Baker Hughes, Bloomberg, KGI Securities Research

Figure 3: Key assumptions for PTTEP

	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
Benchmark								
Dubai crude price (US\$/bbl)	69	96	82	81	75	70	65	65
Sales Volume								
Total sales volume (KBOED)	416	468	462	509	523	534	531	587
- Liquid (KBOED)	119	129	131	137	146	150	143	147
- Gas (KBOED)	297	339	331	372	377	384	388	440
Selling Price								
ASP (US\$/BOE)	43.5	53.4	48.2	46.6	43.5	41.3	38.9	38.0
- Liquid (US\$/bbl)	66.7	94.9	79.1	77.9	72.1	67.3	62.5	62.5
- Gas (US\$/mmbtu)	5.7	6.3	6.0	5.8	5.4	5.2	5.0	5.0
Cost								
Unit costs (US\$/BOE)	28.5	28.4	27.7	29.0	28.7	28.7	28.8	28.9

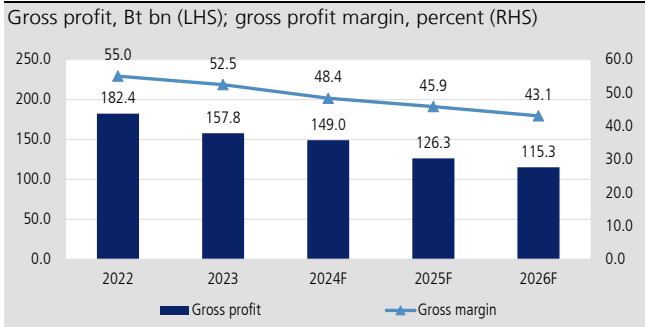
Source: Company data, KGI Securities Research

Figure 4: Company profile

PTT Exploration and Production (PTTEP) is the national petroleum exploration and production company. Its principal business operations are exploration and production of petroleum in Thailand and overseas, foreign gas pipeline transportation, and investment in projects strategically connected to the energy business.

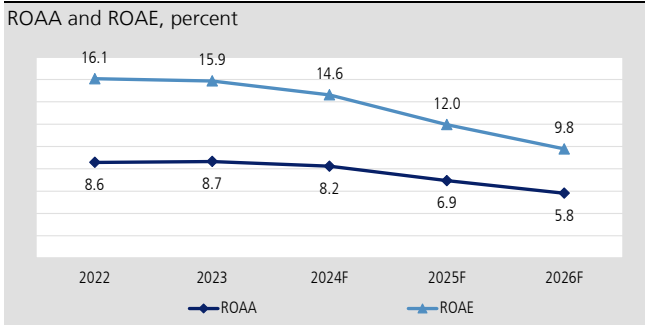
Source: Company data, KGI Securities Research

Figure 6: Gross profit



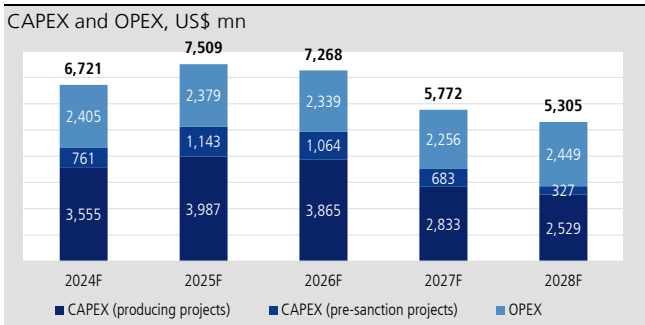
Source: Company data, KGI Securities Research

Figure 8: Company ROAA and ROAE



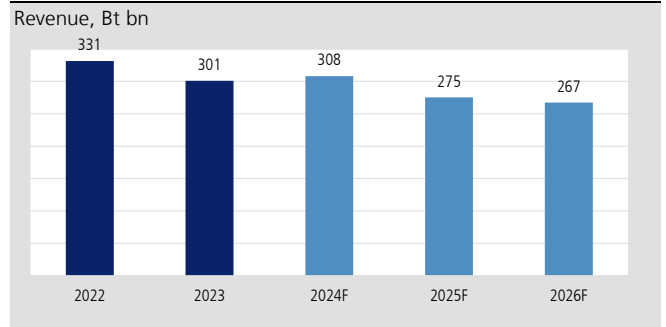
Source: Company data, KGI Securities Research

Figure 10: Five-year investment plan (2024F-2028F)



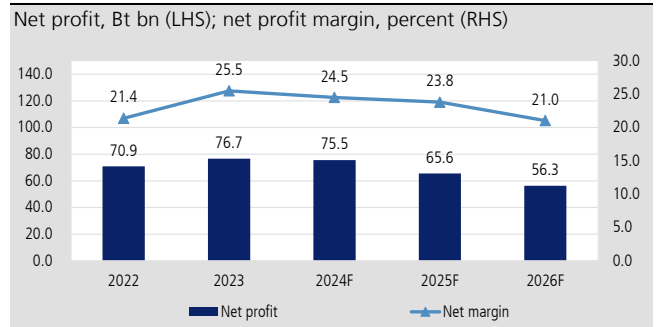
Source: Company data, KGI Securities Research

Figure 5: Revenue



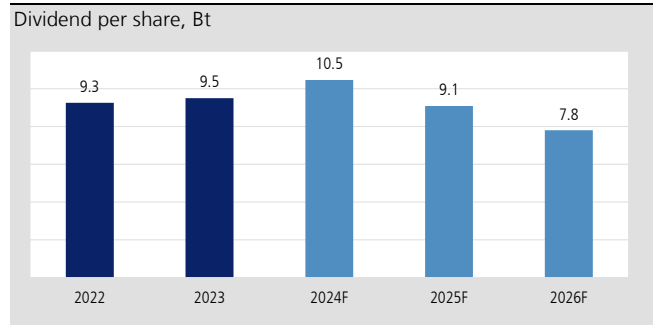
Source: Company data, KGI Securities Research

Figure 7: Net profit



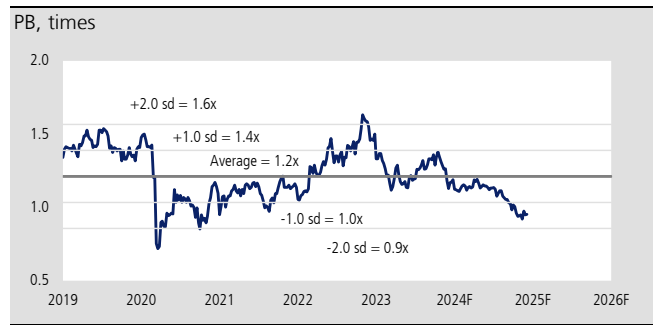
Source: Company data, KGI Securities Research

Figure 9: Dividend



Source: Company data, KGI Securities Research

Figure 11: Company trading PB



Source: KGI Securities Research

Quarterly Income Statement

(Bt mn)	Mar-22A	Jun-22A	Sep-22A	Dec-22A	Mar-23A	Jun-23A	Sep-23A	Dec-23A	Mar-24A	Jun-24A	Sep-24A
Income Statement (Bt mn)											
Revenue	68,149	83,088	88,503	91,611	75,493	67,479	78,206	79,516	75,737	84,370	75,793
Cost of Goods Sold	(29,221)	(36,168)	(41,626)	(41,934)	(33,963)	(31,236)	(38,301)	(39,426)	(38,285)	(42,464)	(42,813)
Gross Profit	38,928	46,920	46,877	49,676	41,530	36,243	39,905	40,090	37,452	41,906	32,980
Operating Expenses	(3,061)	(3,865)	(2,919)	(10,541)	(3,410)	(3,646)	(3,979)	(5,944)	(3,758)	(4,094)	(4,492)
Other incomes	601	1,357	807	4,220	1,130	1,433	1,106	1,363	1,051	1,181	1,739
Operating Profit	36,468	44,412	44,764	43,356	39,250	34,030	37,031	35,509	34,745	38,993	30,227
Depreciation of fixed assets	17,087	19,443	22,973	23,666	16,584	19,310	22,133	23,295	22,230	26,292	25,182
Operating EBITDA	53,554	63,855	67,737	67,021	55,834	53,340	59,164	58,805	56,975	65,285	55,409
Non-Operating Income	141	510	5,983	817	1,182	2,270	1,298	1,537	2,024	2,950	2,091
Interest Income	141	192	416	817	1,182	1,288	1,298	1,537	2,024	2,437	2,091
Other Non-op Income	0	317	5,567	0	0	983	0	0	0	513	0
Non-Operating Expenses	(9,845)	(2,194)	(2,270)	(5,683)	(4,003)	(2,606)	(3,318)	(3,180)	(3,452)	(3,212)	(3,973)
Interest Expenses	(1,718)	(2,194)	(2,270)	(2,037)	(2,617)	(2,606)	(2,653)	(2,367)	(3,026)	(3,212)	(2,938)
Other Non-op Expenses	(8,127)	0	0	(3,646)	(1,386)	0	(665)	(813)	(426)	0	(1,034)
Net Investment Income/(Loss)	350	445	(619)	492	419	331	320	407	362	201	35
Pre-tax Profit	27,114	43,173	47,858	38,982	36,847	34,025	35,331	34,273	33,679	38,932	28,380
Current Taxation	(16,436)	(21,042)	(17,006)	(17,811)	(18,199)	(13,283)	(17,035)	(15,186)	(14,922)	(14,988)	(11,261)
Minorities	0	0	0	0	0	0	(2)	0	(1)	(3)	(3)
Extraordinary items	(159)	(1,531)	(6,681)	(5,560)	633	295	(197)	(800)	(76)	30	742
Net Profit	10,519	20,600	24,172	15,611	19,281	21,036	18,097	18,288	18,680	23,971	17,858
EPS (Bt)	2.65	5.19	6.09	3.93	4.86	5.30	4.56	4.61	4.71	6.04	4.50
Margins											
Gross profit margin	57.1	56.5	53.0	54.2	55.0	53.7	51.0	50.4	49.5	49.7	43.5
Operating EBIT margin	53.5	53.5	50.6	47.3	52.0	50.4	47.4	44.7	45.9	46.2	39.9
Operating EBITDA margin	78.6	76.9	76.5	73.2	74.0	79.0	75.7	74.0	75.2	77.4	73.1
Net profit margin	15.4	24.8	27.3	17.0	25.5	31.2	23.1	23.0	24.7	28.4	23.6
Growth											
Revenue growth	59.4	51.5	51.8	45.0	10.8	(18.8)	(11.6)	(13.2)	0.3	25.0	(3.1)
Operating EBIT growth	235.3	97.1	93.8	30.0	7.6	(23.4)	(17.3)	(18.1)	(11.5)	14.6	(18.4)
Operating EBITDA growth	95.2	51.0	57.3	41.4	4.3	(16.5)	(12.7)	(12.3)	2.0	22.4	(6.3)
Net profit growth	(8.8)	188.5	153.2	46.6	83.3	2.1	(25.1)	17.1	(3.1)	13.9	(1.3)

Source: Company data, KGI Securities Research

Balance Sheet

As of 31 Dec (Bt mn)	2022	2023	2024F	2025F	2026F
Total Assets	869,864	902,821	932,235	958,312	978,801
Current Assets	196,842	234,800	193,904	153,712	115,988
Cash & ST Investments	122,324	144,387	114,236	80,798	43,938
Inventories	19,115	20,914	21,780	20,408	20,839
Accounts Receivable	42,166	62,241	50,629	45,247	43,953
Others	13,238	7,259	7,259	7,259	7,259
Non-current Assets	673,022	668,021	738,332	804,600	862,813
LT Investments	9,609	9,783	32,751	32,751	32,751
Net fixed Assets	410,614	440,271	487,614	553,882	612,095
Others	252,799	217,967	217,967	217,967	217,967
Total Liabilities	402,744	403,378	398,804	395,375	390,537
Current Liabilities	114,616	88,590	84,016	86,503	102,724
Accounts Payable	52,940	49,412	54,450	51,021	52,098
ST Borrowings	10,479	9,612	0	5,915	21,060
Others	51,196	29,567	29,567	29,567	29,567
Long-term Liabilities	288,128	314,788	314,788	308,873	287,813
Long-term Debts	121,999	115,427	115,427	109,512	88,452
Others	166,129	199,361	199,361	199,361	199,361
Shareholders' Equity	467,121	499,443	533,431	562,937	588,264
Common Stock	3,970	3,970	3,970	3,970	3,970
Capital Surplus	134,086	128,485	128,485	128,485	128,485
Retained Earnings	329,065	366,988	400,977	430,482	455,809
Hybrid Bond	0	0	0	0	0

Source: KGI Securities Research

Key Ratios

Year to 31 Dec (Bt mn)	2022	2023	2024F	2025F	2026F
Forecast Drivers					
Growth (% YoY)					
Sales	51.3	(9.3)	2.4	(10.6)	(2.9)
OP	88.1	(13.7)	(6.7)	(16.5)	(10.4)
EBITDA	57.3	(9.4)	(0.7)	(12.3)	(5.0)
NP	82.4	8.2	(1.5)	(13.2)	(14.2)
EPS	82.4	8.2	(1.5)	(13.2)	(14.2)
Profitability (%)					
Gross Margin	55.0	52.5	48.4	45.9	43.1
Operating Margin	51.0	48.5	44.2	41.3	38.1
EBITDA Margin	74.0	73.9	71.6	70.3	68.7
Net Profit Margin	21.4	25.5	24.5	23.8	21.0
ROAA	8.6	8.7	8.2	6.9	5.8
ROAE	16.1	15.9	14.6	12.0	9.8
Stability					
Gross Debt/Equity (%)	28.4	25.0	21.6	20.5	18.6
Net Debt/Equity (%)	2.2	(3.9)	0.2	6.2	11.1
Interest Coverage (x)	18.4	14.7	12.2	11.1	9.5
Interest & ST Debt Coverage (x)	8.1	7.6	12.2	7.3	3.4
Cash Flow Interest Coverage (x)	20.1	14.8	15.2	13.6	12.5
Cash Flow/Interest & ST Debt (x)	8.8	7.6	15.2	8.9	4.4
Current Ratio (x)	1.7	2.7	2.3	1.8	1.1
Quick Ratio (x)	1.6	2.4	2.0	1.5	0.9
Net Debt (Bt mn)	10,154	(19,348)	1,191	34,629	65,574
Per Share Data (Bt)					
EPS	17.9	19.3	19.0	16.5	14.2
CFPS	41.7	38.2	45.5	38.7	36.5
BVPS	117.7	125.8	134.3	141.8	148.1
SPS	--	--	--	--	--
EBITDA/Share	61.8	55.9	55.5	48.7	46.3
DPS	9.3	9.5	10.5	9.1	7.8
Activity					
Asset Turnover (x)	0.4	0.3	0.3	0.3	0.3
Days Receivables	46.4	75.6	60.0	60.0	60.0
Days Inventory	46.8	53.4	50.0	50.0	50.0
Days Payable	35.5	34.6	34.2	34.2	34.2
Cash Cycle	57.7	94.4	75.8	75.8	75.8

Source: KGI Securities Research

Profit & Loss

Year to 31 Dec (Bt mn)	2022	2023	2024F	2025F	2026F
Revenue	331,350	300,694	307,992	275,251	267,381
Cost of Goods Sold	(148,949)	(142,926)	(158,993)	(148,981)	(152,125)
Gross Profit	182,401	157,768	148,998	126,270	115,255
Operating Expenses	(20,386)	(16,979)	(17,689)	(17,531)	(18,413)
Other incomes	6,985	5,032	4,802	4,850	4,898
Operating Profit	169,000	145,820	136,111	113,589	101,740
Depreciation of fixed assets	83,168	81,322	89,165	84,661	86,838
Operating EBITDA	252,168	227,142	225,276	198,251	188,579
Non-Operating Income	1,567	5,304	7,325	9,661	5,470
Interest Income	1,567	5,304	7,325	9,661	5,470
Other Non-op Income	0	0	0	0	0
Non-Operating Expenses	(14,108)	(12,124)	(11,866)	(11,322)	(11,561)
Interest Expenses	(8,218)	(10,243)	(11,866)	(11,322)	(11,561)
Other Non-op Expenses	(5,889)	(1,881)	0	0	0
Net Investment Income/(Loss)	668	1,477	1,764	2,198	2,169
Pre-tax Profit	157,127	140,477	133,335	114,126	97,819
Current Taxation	(72,295)	(63,704)	(57,805)	(48,558)	(41,536)
Minorities	0	(2)	0	0	0
Extraordinary items	(13,931)	(68)	0	0	0
Net Profit	70,901	76,703	75,530	65,568	56,282
EPS (Bt)	17.86	19.32	19.03	16.52	14.18

Source: KGI Securities Research

Cash Flow

Year to 31 Dec (Bt mn)	2022	2023	2024F	2025F	2026F
Operating Cash Flow	165,442	151,851	180,479	153,554	145,060
Net Profit	70,901	76,706	75,530	65,568	56,282
Depreciation & Amortization	83,168	81,322	89,165	84,661	86,838
Change in Working Capital	2,499	(25,403)	15,785	3,325	1,940
Others	8,873	19,226	0	0	0
Investment Cash Flow	(59,286)	(82,447)	(159,476)	(150,930)	(145,051)
Net CAPEX	(61,755)	(76,751)	(136,508)	(150,930)	(145,051)
Change in LT Investment	0	0	0	0	0
Change in Other Assets	2,469	(5,696)	(22,968)	0	0
Free Cash Flow	103,686	75,100	43,971	2,624	10
Financing Cash Flow	(69,360)	(54,186)	(51,153)	(36,062)	(36,870)
Change in Share Capital	0	0	0	0	0
Net Change in Debt	(16,254)	(2,642)	(9,612)	0	(5,915)
Change in Other LT Liab.	(53,106)	(51,544)	(41,541)	(36,062)	(30,955)
Net Cash Flow	36,796	15,218	(30,150)	(33,438)	(36,861)

Source: KGI Securities Research

Rates of Return on Invested Capital

Year	1- Revenue	+ COGS Revenue	+ Depreciation Revenue	+ Operating Exp. Revenue	= Operating Margin	
2022	19.9%	25.1%	6.2%	48.9%		
2023	20.5%	27.0%	5.6%	46.8%		
2024F	22.7%	29.0%	5.7%	42.6%		
2025F	23.4%	30.8%	6.4%	39.5%		
2026F	24.4%	32.5%	6.9%	36.2%		
Year	1/ Revenue	+ Working Capital Revenue	+ Net PPE Revenue	+ Other Assets Revenue	= Capital Turnover	
2022	0.25	1.24	0.76	0.44		
2023	0.49	1.46	0.72	0.37		
2024F	0.36	1.58	0.71	0.38		
2025F	0.24	2.01	0.79	0.33		
2026F	0.05	2.29	0.82	0.32		
Year	Operating Margin	x	Capital Turnover	x	Cash Tax Rate	= After-tax Return on Inv. Capital
2022	48.9%	0.4	49.5	10.8		
2023	46.8%	0.4	54.6	9.6		
2024F	42.6%	0.4	56.6	9.1		
2025F	39.5%	0.3	57.5	7.4		
2026F	36.2%	0.3	57.5	6.6		

Source: KGI Securities Research

PTT Exploration and Production - Recommendation & target price history



Source: KGI Securities Research

Company's ESG details

Environment

- PTTEP attempts to increase the value of waste from the petroleum production process. Those include Flare Gas Conversion to Carbon Nanotube (CNT), CO₂ Conversion to Cyclic Carbonate (CCC), Curing Technology for CO₂ Sequestration in Artificial Reefs, Recycled Drill Cuttings, Oil sludge to Graphene, waste to electricity energy, wastes to Refuse-Derived Fuel (RDF), etc.
- Water is a crucial resource to petroleum exploration and production activities. PTTEP conducts an assessment on risks related to water resource management in all operating areas to prevent issues on water quality and water scarcity in neighboring communities. The company also improves water efficiency and water conservation and emphasizes the importance of leakage detection programs, maintenance, and the reduction of water losses from unnecessary activities.
- PTTEP manages biodiversity and ecosystem service risks by integrating them into the Environmental Impact Assessment of all E&P projects as well as implementing a Biodiversity Action Plan at projects with a high level of biodiversity risks. The action plan is designed to prevent the loss of endangered species as well as protecting and restoring ecosystem services that might be impacted by the company's operations. The biodiversity and ecosystem service risk management assessment, conducted in 2017 and reviewed in 2021, showed that no project possessed high biodiversity risks. Moreover, PTTEP has completed the voluntary Biodiversity Action Plan (BAP) for all operational assets that possess medium-level risks. The company also organized workshops to enhance knowledge and understanding on biodiversity for personnel working in areas of moderate risk level.

Social

- PTTEP respects human rights wherever it operates, as guided by its corporate good governance principles, business ethics, CSR framework and sustainability philosophy and based on the Universal Declaration of Human Rights (UDHR) and the International Labor Organization's (ILO) Declaration on Fundamental Principles and Rights at Work. In addition, the company is committed to aligning its human rights implementation with the National Action Plan on Business and Human Rights – NAP in all related dimensions and expects its personnel to uphold PTTEP's Human Rights Policy and seeks business partners and suppliers' cooperation in honoring human rights principles in any business activities.
- Safety is a business principle under the aspiration to achieve zero incidents (Target Zero). A proactive safety culture has been instilled and emphasis is placed on the personal safety of all its workforce and process safety at its facilities. The company implements the Safety, Security, Health and Environment (SSHE) Management System, which is in line with its SSHE policy and complies with international standards and industries best practices, to ensure that everyone working with the company returns home safely and that incidents are prevented to avoid causing impacts on stakeholders and the environment.
- PTTEP restores marine natural resources of the Thai sea, aligned with the United Nations Sustainable Development Goals (SDG) #14, through the Aquatic Animal Hatchery Learning Center project and the establishment of Conservation Network to raise awareness of sustainable use of resources. The company plans to set up a Sea Turtle Hospital in Songkhla Province and support the planting and maintenance of a mangrove forest. This will become a nursery and habitat for numerous marine larvae. In 2020, PTTEP's social development projects under the "Ocean for Life" strategy were being the highlight. The highlighted projects encompassed mangrove forestation, environmental and ocean waste management, ecosystem preservation, marine resource enhancements. In addition, the project supported the local fishing community with capability building in term of products and marketing for local fishermen in operating sites to strengthen the local economy.

Governance

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

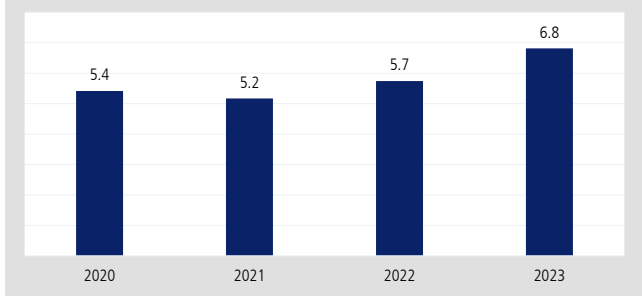
Climate Management (Subset of Environment)

- PTTEP targets to drive organizational implementation to achieve Net Zero Greenhouse Gas Emissions by 2050 for E&P business covering Scope 1 and Scope 2 under PTTEP's operational control.
- PTTEP set targets on reduction of greenhouse gas emissions intensity by 30% by 2030 and 50% by 2040 from 2020 base year.
- PTTEP released direct greenhouse gas (GHG) emissions (Scope 1 & 2) of 6.76mn tons of CO₂ equivalent in 2023, rising YoY from 5.73mn tons of CO₂ equivalent in 2022 due to i) the first full-year contribution of holding 100% stake on Bongkot North and Erawan fields and ii) higher production from Erawan field.

Source: Company data, KGI Securities Research

Total GHG emissions

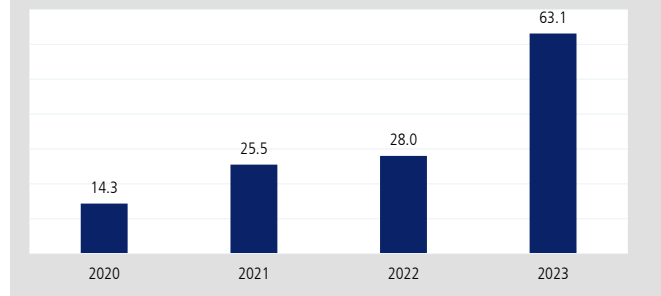
GHG emissions, mn tons of CO₂e



Source: Company data, SETSMART, KGI Securities Research

Total electricity consumption

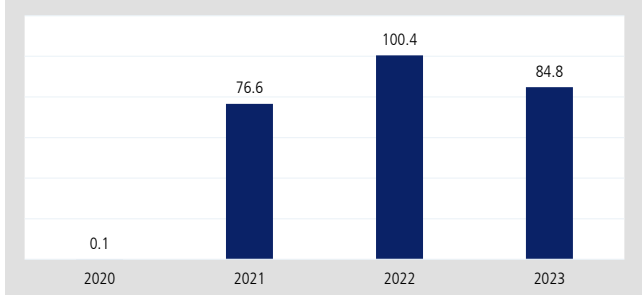
Electricity consumption, GWh



Source: Company data, SETSMART, KGI Securities Research

Total water consumption

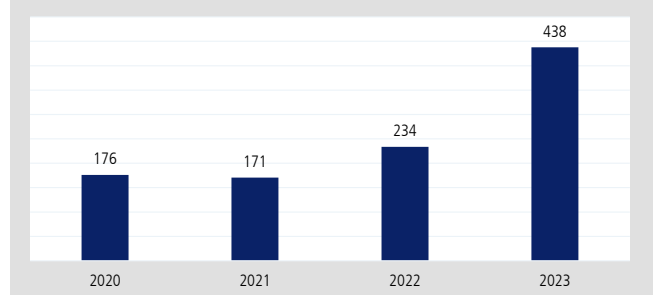
Water consumption, mn cubic meters



Source: Company data, SETSMART, KGI Securities Research

Total waste

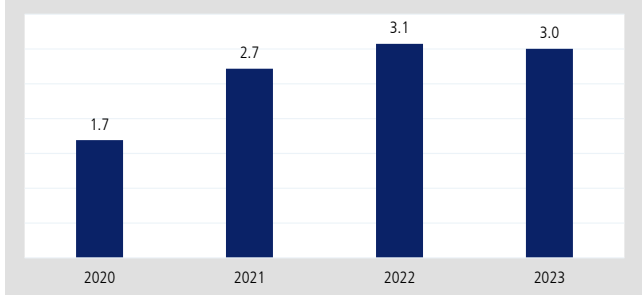
Waste generated, k tons



Source: Company data, SETSMART, KGI Securities Research

Employee turnover

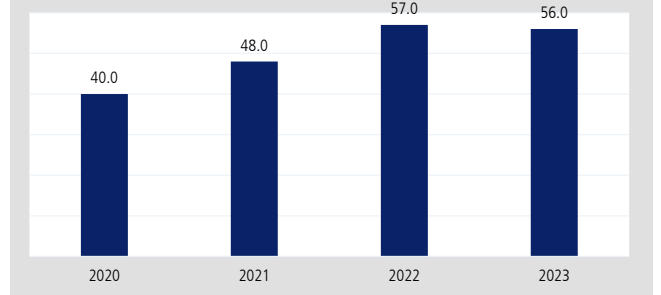
Employee turnover, percent



Source: Company data, SETSMART, KGI Securities Research

Average employee training hours

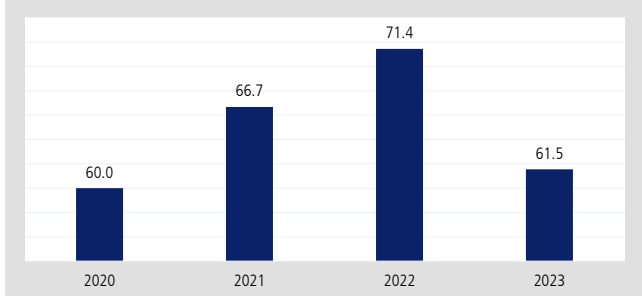
Average employee training hour, hours per person per year



Source: Company data, SETSMART, KGI Securities Research

Proportion of independent directors

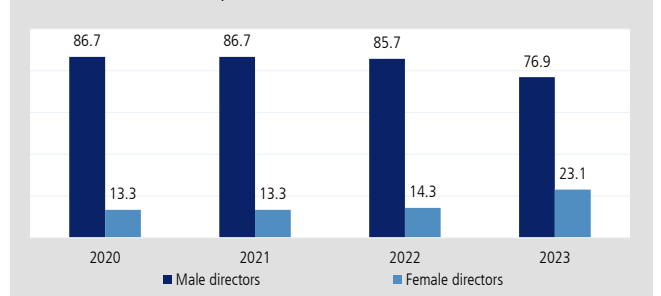
Independent directors, percent



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
ADVANC	ADVANCED INFO SERVICE	AAA	IVL	INDORAMA VENTURES	AA
AMATA	AMATA CORPORATION	AAA	KBANK	KASIKORNBANK	AAA
AOT	AIRPORTS OF THAILAND	A	KKP	KIATNAKIN PHATRA BANK	BBB
AP	AP (THAILAND)	AA	KTB	KRUNG THAI BANK	AAA
BAFS	BANGKOK AVIATION FUEL SERVICES PCL.	AA	KTC	KRUNGTHAI CARD	AAA
BAM	BANGKOK COMMERCIAL ASSET MANAGEMENT	AA	LH	LAND AND HOUSES	A
BANPU	BANPU	AAA	MAJOR	MAJOR CINEPLEX GROUP	AA
BBGI	BBGI	AA	MINT	MINOR INTERNATIONAL	AA
BBL	BANGKOK BANK	AA	MTC	MUANGTHAI CAPITAL	A
BCH	BANGKOK CHAIN HOSPITAL	AA	OR	PTT OIL AND RETAIL BUSINESS	AAA
BCPG	BCPG	AA	ORI	ORIGIN PROPERTY	AA
BDMS	BANGKOK DUSIT MEDICAL SERVICES	AA	OSP	OSOTSPA	AA
BEM	BANGKOK EXPRESSWAY AND METRO	AA	PLANB	PLAN B MEDIA	AA
BGRIM	B. GRIMM POWER	AAA	PSH	PRUKSA HOLDING	BBB
BPP	BANPU POWER	AAA	PTT	PTT	AAA
BTS	BTS GROUP HOLDINGS	AA	PTTEP	PTT EXPLORATION AND PRODUCTION	AAA
CBG	CARABAO GROUP	A	PTTGC	PTT GLOBAL CHEMICAL	AAA
CENDEL	CENTRAL PLAZA HOTEL	A	RATCH	RATCH GROUP	AA
CK	CH. KARNCHANG	A	RBF	R&B FOOD SUPPLY	BBB
CKP	CK POWER	AAA	SAK	SAKSIAM LEASING	A
COM7	COM7	A	SAPPE	SAPPE	BBB
CPALL	CP ALL	AAA	SAWAD	SRISAWAD CORPORATION	BBB
CPAXT	CP AXTRA	AAA	SCB	SCB X	AA
CPF	CHAROEN POKPHAND FOODS	AAA	SCGP	SCG PACKAGING	AAA
CPN	CENTRAL PATTANA	AA	SHR	S HOTELS AND RESORTS	A
CRC	CENTRAL RETAIL CORPORATION	AAA	SMPC	SAHAMITR PRESSURE CONTAINER	AA
EGCO	ELECTRICITY GENERATING	AA	SPALI	SUPALAI	AA
ERW	THE ERAWAN GROUP	A	STECON	STECON GROUP	A
GFPT	GFPT	BBB	SYNEX	SYNEX (THAILAND)	A
GLOBAL	SIAM GLOBAL HOUSE	AA	TCAP	THANACHART CAPITAL	A
GPSC	GLOBAL POWER SYNERGY	AA	TFG	THAIFOODS GROUP	A
GULF	GULF ENERGY DEVELOPMENT	AA	TISCO	TISCO FINANCIAL GROUP	AAA
HANA	HANA MICROELECTRONICS	AA	TOP	THAI OIL	AAA
HMPRO	HOME PRODUCT CENTER	AA	TTB	TMBTHANACHART BANK	AA
IRPC	IRPC	AA	WHA	WHA CORPORATION	AAA

Source: 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
AEONTS	AEON THANA SINSAP (THAILAND)	CRC	CENTRAL RETAIL CORPORATION	PTT	PTT
AMA	AMA MARINE	DELTA	DELTA ELECTRONICS (THAILAND)	PTTEP	PTT EXPLORATION AND PRODUCTION
AMATA	AMATA CORPORATION	DOHOM	DOHOME	PTTGC	PTT GLOBAL CHEMICAL
AOT	AIRPORTS OF THAILAND	EGCO	ELECTRICITY GENERATING	QH	QUALITY HOUSES
AP	AP (THAILAND)	ERW	THE ERAWAN GROUP	RATCH	RATCH GROUP
BAFS	BANGKOK AVIATION FUEL SERVICES PCL.	GFPT	GFPT	RBF	R&B FOOD SUPPLY
BAM	BANGKOK COMMERCIAL ASSET MANAGEMENT	GLOBAL	SIAM GLOBAL HOUSE	SAK	SAKSIAM LEASING
BANPU	BANPU	GPSC	GLOBAL POWER SYNERGY	SAPPE	SAPPE
BBGI	BBGI	GULF	GULF ENERGY DEVELOPMENT	SCB	SCB X
BBL	BANGKOK BANK	HANA	HANA MICROELECTRONICS	SCGP	SCG PACKAGING
BCH	BANGKOK CHAIN HOSPITAL	HMPRO	HOME PRODUCT CENTER	SHR	S HOTELS AND RESORTS
BCP	BANGCHAK CORPORATION	IRPC	IRPC	SMPC	SAHAMITR PRESSURE CONTAINER
BCPG	BCPG	ITC	I-TAIL CORPORATION	SPALI	SUPALAI
BDMS	BANGKOK DUSIT MEDICAL SERVICES	IVL	INDORAMA VENTURES	SPRC	STAR PETROLEUM REFINING
BEC	BEC WORLD	KBANK	KASIKORNBANK	SUN	SUNSWEEP
BEM	BANGKOK EXPRESSWAY AND METRO	KCE	KCE ELECTRONICS	SVI	SVI
BGRIM	B.GRIMM POWER	KKP	KIATNAKIN PHATRA BANK	SYNEX	SYNNEX (THAILAND)
BH	BUMRUNGRAD HOSPITAL	KTB	KRUNG THAI BANK	TCAP	THANACHART CAPITAL
BPP	BANPU POWER	KTC	KRUNGTHAI CARD	TFG	THAIFOODS GROUP
BTS	BTS GROUP HOLDINGS	LH	LAND AND HOUSES	TIDLOR	NGERN TID LOR
CBG	CARABAO GROUP	LPN	L.P.N. DEVELOPMENT	TISCO	TISCO FINANCIAL GROUP
CENTEL	CENTRAL PLAZA HOTEL	MAJOR	MAJOR CINEPLEX GROUP	TKN	TAOKAENOI FOOD & MARKETING
CK	CH. KARNCHANG	MINT	MINOR INTERNATIONAL	TOP	THAI OIL
CKP	CK POWER	MTC	MUANGTHAI CAPITAL	TRUE	TRUE CORPORATION
COM7	COM7	OR	PTT OIL AND RETAIL BUSINESS	TTB	TMBTHANACHART BANK
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
BSRC	BANGCHAK SRIRACHA	EKH	EKACHAI MEDICAL CARE	JMART	JAYMART GROUP HOLDINGS
BTG	BETAGRO	HUMAN	HUMANICA	TNP	THANAPIRIYA



Companies with Good CG Scoring

Stock	Company name	Stock	Company name	Stock	Company name
JMT	JMT NETWORK SERVICES	SAWAD	SRISAWAD CORPORATION	SPA	SIAM WELLNESS GROUP

Companies classified Not in the three highest score groups

Stock	Company name	Stock	Company name	Stock	Company name
AU	AFTER YOU	PTG	PTG ENERGY	TU	THAI UNION GROUP
CHG	CHULARAT HOSPITAL	SAV	SAMART AVIATION SOLUTIONS		
PLT	PILATUS MARINE	SISB	SISB		

Source: 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	SAKSAM 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	SMP	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
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CENEL	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	SRI SAWAD 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	SISB	SISB
AEONTS	AEON THANA SINSAP (THAILAND)	CK	CH. KARNCHANG	SPA	SIAM WELLNESS GROUP
AOT	AIRPORTS OF THAILAND	CKP	CK POWER	STECON	STECON GROUP
AU	AFTER YOU	EKH	EKACHAI MEDICAL CARE	SUN	SUNSWEET
BDMS	BANGKOK DUSIT MEDICAL SERVICES	JMT	JMT NETWORK SERVICES	SYNEX	SYNNEX (THAILAND)
BEM	BANGKOK EXPRESSWAY AND METRO	PLT	PILATUS MARINE		
BH	BUMRUNGRAD HOSPITAL	SAV	SAMART AVIATION SOLUTIONS		

Source: www.cgthailand.org

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KGI Locations

China	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
Taiwan	Taipei	700 Mingshui Road, Taipei, Taiwan Telephone886.2.2181.8888 · Facsimile886.2.8501.1691
Hong Kong		41/F Central Plaza, 18 Harbour Road, Wanchai, Hong Kong Telephone 852.2878.6888 Facsimile 852.2878.6800
Thailand	Bangkok	195 One Bangkok Tower 4 18th - 19th floors Witthayu Road Lumpini, Pathumwan, Bangkok 10330, Thailand Telephone 66.2658.8888 Facsimile 66.2658.8014
Singapore		4 Shenton Way #13-01 SGX Centre 2 Singapore 068807 Telephone 65.6202.1188 Facsimile 65.6534.4826

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