

Outperform • Upgraded

| | |
|-------------------------------|-------|
| Price as of 17 Jan 2024 | 35.25 |
| 12M target price (Bt/shr) | 46.00 |
| Unchanged/Revised up(down)(%) | (6.1) |
| Upside/downside (%) | 30.5 |

Key messages

เราคาดว่ากำไรสุทธิของ PTTGC ใน 4Q66F จะอยู่ที่ 4.5 พันล้านบาท (+567% YoY, +217% QoQ) โดยกำไรที่เพิ่มขึ้นอย่างมากทั้ง YoY และ QoQ จะมาจากกำไรพิเศษ (ก่อนหักภาษี) สองรายการ ได้แก่ i) กำไร ประมาณ 3.75 พันล้านบาท จากการขายหุ้น GC Logistics (GCL) ซึ่งทำให้สัดส่วนการถือหุ้นลดลงจาก 100% เหลือ 50% และ ii) กำไรประมาณ 1.5 พันล้านบาทจากการซื้อคืนพันธบัตรในสหรัฐฯ ซึ่งมียอดเงินต้น 214 ล้านดอลลาร์ใน 4Q66 แต่หากไม่รวมสองรายการนี้ เราคาดว่ากำไรจากธุรกิจหลักจะลดลง QoQ เนื่องจาก market GRM ลดลง, มีผลขาดทุนจากสต็อกน้ำมันเพิ่มขึ้น และอัตราการใช้กำลังการผลิตของ olefins ลดลง เราปรับลดราคาเป้าหมายปี 2567F ลงเหลือ 46.00 บาท จาก 49.00 บาท โดยอิงจาก i) EV/EBITDA ที่ 8.0x และ ii) EBITDA ปี 2025F แล้วหักส่วนลดกลับมาหนึ่งปี โดยใช้ WACC ที่ 7.1% เพื่อสะท้อนถึงส่วนลด 5% เนื่องจากความกังวลเกี่ยวกับโอกาสที่ต้นทุนก๊าซเอเทนซึ่งใช้เป็น feedstock ในระยะยาวจะปรับเพิ่มขึ้น หลังจากที่รัฐบาลเข้ามาแทรกแซงต้นทุน GSP ของ PTT ด้วยการกำหนดค่าใช้จ่ายโครงสร้างราคา Single Pool Gas Price ใหม่ แต่อย่างไรก็ตาม เรายังคงคำแนะนำซื้อ PTTGC จากความหวังว่า polyolefins (PE) จะฟื้นตัวขึ้นในปีนี้ โดยเฉพาะใน 2H67F

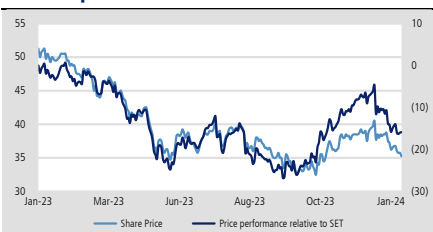
Trading data

| | | | |
|----------------------------|---------------|-------|--------|
| Mkt cap (Btbn/US\$m) | 159/4,523 | | |
| Outstanding shares (mn) | 4,509 | | |
| Foreign ownership (mn) | 508 | | |
| 3M avg. daily trading (mn) | 11.95 | | |
| 52-week trading range (Bt) | 32.50 – 51.50 | | |
| Performance (%) | 3M | 6M | 12M |
| Absolute | 4.4 | (4.1) | (31.6) |
| Relative | 7.6 | 6.2 | (16.5) |

Quarterly EPS

| Bt | 1Q | 2Q | 3Q | 4Q |
|------|------|--------|--------|------|
| 2021 | 2.15 | 5.55 | 1.55 | 0.72 |
| 2022 | 0.58 | 0.31 | (2.97) | 0.15 |
| 2023 | 0.02 | (1.24) | 0.32 | |

Share price chart



Source: SET

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PTT Global Chemical
(PTTGC.BK/PTTGC TB)*



ประมาณการ 4Q66F: มีกำไรก่อนใหญ่จากสองรายการพิเศษ

Event

ประมาณการ 4Q66F

Impact

คาดว่ากำไรใน 4Q66F จะเพิ่มขึ้นถึง 567% YoY และ 217% QoQ

เราคาดว่ากำไรสุทธิของ PTTGC ใน 4Q66F จะอยู่ที่ 4.5 พันล้านบาท (+567% YoY, +217% QoQ) โดยกำไรที่เพิ่มขึ้นอย่างมากทั้ง YoY และ QoQ จะมาจากกำไรพิเศษ (ก่อนหักภาษี) สองรายการ ได้แก่ i) กำไร ประมาณ 3.75 พันล้านบาทจากการขายหุ้น GC Logistics (GCL) ซึ่งทำให้สัดส่วนการถือหุ้นลดลงจาก 100% เหลือ 50% และ ii) กำไรประมาณ 1.5 พันล้านบาทจากการซื้อคืนพันธบัตรในสหรัฐฯ ซึ่งมียอดเงินต้น 214 ล้านดอลลาร์ใน 4Q66 แต่หากไม่รวมสองรายการนี้ เราคาดว่ากำไรจากธุรกิจหลักจะลดลง QoQ เนื่องจาก market GRM ลดลง, มีผลขาดทุนจากสต็อกน้ำมันเพิ่มขึ้น และอัตราการใช้กำลังการผลิตของ olefins ลดลง โดยเราคาดว่า market GRM ของ PTTGC จะลดลง 27% QoQ เหลือ US\$9.2/bbl เพราะ spread ของน้ำมันเครื่องบินและน้ำมันดีเซลลดลงเหลือ US\$23.6/bbl และ US\$21.1/bbl ตามลำดับ และ crude premium เพิ่มขึ้นเป็น US\$7.0/bbl นอกจากนี้ เรายังคาดว่าบริษัทจะบันทึกผลขาดทุนจากสต็อกน้ำมัน 3.4 พันล้านบาท แยก QoQ จากที่มีกำไรจากสต็อกน้ำมัน 3.7 พันล้านบาท เพราะราคาน้ำมันดิบดูไบลดลง US\$16/bbl จากเดือนกันยายนถึงธันวาคม ซึ่งไปก่อนนั้น เรายังคาดว่าอัตราการใช้กำลังการผลิตของโพลีเอทิลีนจะลดลง QoQ จาก 89% เหลือ 80% เพราะมีการปิดโรงงาน OLE I กำลังการผลิต 488KTA นาน 37 วัน ในขณะที่เดียวกันราคา HDPE, LLPDE และ LDPE แทบไม่เปลี่ยนแปลง QoQ อยู่ที่ US\$1,022/ton, US\$975/ton และ US\$1,005/ton ตามลำดับ ทำให้อัตรากำไรขั้นต้นของผลิตภัณฑ์ olefins ที่ผลิตจากก๊าซธรรมชาติ QoQ แต่อย่างไรก็ตาม เราคาดว่ากำไรจากธุรกิจ aromatics จะเพิ่มขึ้น QoQ เพราะไม่มีการปิดโรงงาน Aromatics II ตามแผนนาน 37 วันเหมือนกับใน 3Q66

ติดตามความคืบหน้าของการเจรจาระหว่าง PTT-PTTGC จากผลกระทบของ Single Pool Gas Price

ตามโครงสร้าง Single Pool Gas Price ใหม่ของประเทศไทย ซึ่งจะช่วยให้ต้นทุนการดำเนินงานของโรงแยกก๊าซ (GSP) สูงขึ้น เราคาดว่า PTT Pcl. (PTT.BK/PTT TB)* จะเจรจากับ PTTGC ขอบปรับสัญญาซื้อขายก๊าซเอเทน (Ethane Gas Sales Agreement) ซึ่งผูกอยู่กับราคาผลิตภัณฑ์ polyethylene (PE) เท่านั้น เพื่อลดภาระจากโครงสร้าง Single Pool Gas Price ใหม่ แต่อย่างไรก็ตาม เราเชื่อว่าการเจรจาสัญญาซื้อขายก๊าซเอเทนฉบับใหม่ระหว่าง PTT และ PTTGC จะใช้เวลา 6-12 เดือน ดังนั้น PTT จึงน่าจะเป็นบริษัทเดียวที่ได้รับผลกระทบจากโครงสร้างราคาก๊าซใหม่ในปีต่อไปได้ โดยในปัจจุบัน PTTGC ยืนยันว่ายังซื้อก๊าซเอเทนโดยไม่มีการปรับสูตรคำนวณราคา

Valuation & action

เราปรับลดราคาเป้าหมายปี 2567F ลงเหลือ 46.00 บาท จาก 49.00 บาท โดยอิงจาก i) EV/EBITDA ที่ 8.0x และ ii) EBITDA ปี 2025F แล้วหักส่วนลดกลับมาหนึ่งปี โดยใช้ WACC ที่ 7.1% เพื่อสะท้อนถึงส่วนลด 5% เนื่องจากความกังวลเกี่ยวกับโอกาสที่ต้นทุนก๊าซเอเทนซึ่งใช้เป็น feedstock ในระยะยาวจะปรับเพิ่มขึ้น หลังจากที่รัฐบาลเข้ามาแทรกแซงต้นทุน GSP ของ PTT ด้วยการกำหนดค่าใช้จ่ายโครงสร้างราคา Single Pool Gas Price ใหม่ แต่อย่างไรก็ตาม เรายังคงคำแนะนำซื้อ PTTGC จากความหวังว่า polyolefins (PE) จะฟื้นตัวขึ้นในปีนี้ โดยเฉพาะใน 2H67F

Risks

ความผันผวนของราคาน้ำมันดิบ, GRM และ spread ปีโตรเคมี

Key financials and valuation

| | Dec-21A | Dec-22A | Dec-23F | Dec-24F | Dec-25F |
|---------------------------|---------|---------|---------|---------|---------|
| Revenue (Bt mn) | 468,953 | 683,954 | 616,079 | 601,747 | 599,910 |
| Gross profit (Bt mn) | 59,170 | 54,002 | 45,653 | 49,476 | 54,888 |
| EBIT (Bt mn) | 49,779 | 18,975 | 14,169 | 17,813 | 22,932 |
| Net profit (Bt mn) | 44,982 | (8,752) | 1,127 | 7,263 | 14,739 |
| EPS (Bt) | 9.98 | (1.94) | 0.25 | 1.61 | 3.27 |
| DPS (Bt) | 3.75 | 1.00 | 1.00 | 1.00 | 1.63 |
| EPS growth (%) | 22,435 | N.A. | N.A. | 544.2 | 102.9 |
| P/E (x) | 5.9 | N.A. | 141.0 | 21.9 | 10.8 |
| P/B (x) | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 |
| EV/EBITDA (x) | 5.9 | 9.7 | 10.0 | 8.2 | 6.5 |
| Net debt to equity (x) | 0.6 | 0.9 | 0.8 | 0.8 | 0.7 |
| Dividend yield (%) | 6.4 | 2.1 | 2.8 | 2.8 | 4.6 |
| Return on avg. equity (%) | 14.6 | (2.8) | 0.4 | 2.4 | 4.9 |

Source: Company data, KGI Securities Research

Figure 1: Expect 4Q23F earnings of Bt4.5bn, up 567% YoY and 217% QoQ

| Bt mn | 4Q23F | 4Q22 | YoY (%) | 3Q23 | QoQ (%) | 2023F | 2022 | YoY (%) |
|------------------------------|-----------|-----------|------------|-----------|------------|-----------|-----------|------------|
| Revenue | 154,124 | 126,442 | 21.9 | 161,678 | (4.7) | 611,898 | 683,954 | (10.5) |
| Cost of goods sold | (146,243) | (121,840) | 20.0 | (145,548) | 0.5 | (573,391) | (629,952) | (9.0) |
| Gross profit | 7,881 | 4,603 | 71.2 | 16,130 | (51.1) | 38,507 | 54,002 | (28.7) |
| Operating expenses | (8,900) | (10,854) | (18.0) | (8,645) | 2.9 | (34,499) | (38,973) | (11.5) |
| Other incomes | 2,435 | 1,725 | 41.1 | 1,516 | 60.6 | 5,952 | 3,946 | 50.9 |
| Operating profit | 1,416 | (4,526) | N.A. | 9,001 | (84.3) | 9,961 | 18,975 | (47.5) |
| Depreciation of fixed assets | 7,200 | 6,995 | 2.9 | 7,200 | 0.0 | 28,397 | 27,563 | 3.0 |
| Operating EBITDA | 8,616 | 2,470 | 248.9 | 16,201 | (46.8) | 38,358 | 46,537 | (17.6) |
| Non-operating income | 963 | - | N.A. | - | N.A. | 3,224 | - | N.A. |
| Non-operating expenses | (3,000) | (6,084) | (50.7) | (4,936) | (39.2) | (13,607) | (32,861) | (58.6) |
| Net Investment income/(loss) | 191 | 555 | (65.6) | (263) | N.A. | (725) | 3,496 | N.A. |
| Pre-tax profit | (430) | (10,055) | 95.7 | 3,802 | N.A. | (1,148) | (10,390) | 89.0 |
| Current taxation | (918) | 2,028 | N.A. | (467) | 96.7 | (1,071) | 2,273 | N.A. |
| Minorities | (15) | 9 | N.A. | (30) | (49.2) | (84) | 1,116 | N.A. |
| Extraordinary items | 5,856 | 8,714 | (32.8) | (1,938) | N.A. | 2,576 | 481 | 435.3 |
| Net profit | 4,523 | 678 | 567.2 | 1,427 | 217.1 | 441 | (8,752) | N.A. |
| EPS (Bt) | 1.00 | 0.15 | 567.2 | 0.32 | 217.1 | 0.10 | (1.94) | N.A. |
| Percent | 4Q23F | 4Q22 | YoY (ppts) | 3Q23 | QoQ (ppts) | 2023F | 2022 | YoY (ppts) |
| Gross profit margin | 5.1 | 3.6 | 1.5 | 10.0 | (4.9) | 6.3 | 7.9 | (1.6) |
| EBITDA margin | 5.6 | 2.0 | 3.6 | 10.0 | (4.4) | 6.3 | 6.8 | (0.5) |
| Net margin | 2.9 | 0.5 | 2.4 | 0.9 | 2.1 | 0.1 | (1.3) | 1.4 |

Source: Company data, KGI Securities Research

Figure 2: Key assumptions for 4Q23F earnings

| | 4Q23F | 4Q22 | YoY (%) | 3Q23 | QoQ (%) |
|---------------------------------|---------|---------|---------|-------|---------|
| Refinery | | | | | |
| Dubai crude price (US\$/bbl) | 84 | 85 | (1.5) | 87 | (3.7) |
| Market GRM (US\$/bbl) | 9.2 | 9.7 | (5.5) | 12.6 | (27.2) |
| Stock gain/(loss) (Bt mn) | (3,422) | (3,518) | 2.7 | 3,674 | N.A. |
| Crude run (KBD) | 152 | 81 | 87.0 | 152 | (0.2) |
| Olefins | | | | | |
| HDPE-naphtha (US\$/ton) | 363 | 361 | 0.6 | 384 | (5.5) |
| LLDPE-naphtha (US\$/ton) | 316 | 326 | (3.1) | 343 | (7.9) |
| LDPE-naphtha (US\$/ton) | 346 | 437 | (20.8) | 345 | 0.3 |
| PP-naphtha (US\$/ton) | 309 | 322 | (4.0) | 321 | (3.7) |
| Olefins utilization rate (%) | 80 | 76 | 5.3 | 89 | (10.1) |
| Polymer utilization rate (%) | 100 | 95 | 5.4 | 109 | (8.1) |
| Aromatics | | | | | |
| PX-condensate (US\$/ton) | 340 | 249 | 36.5 | 357 | (4.8) |
| BZ-condensate (US\$/ton) | 201 | 92 | 118.5 | 183 | 9.8 |
| Aromatics utilization rate (%) | 90 | 82 | 9.8 | 69 | 30.4 |
| Phenol & BPA | | | | | |
| Phenol-BZ (US\$/ton) | 64 | 269 | (76.2) | 89 | (28.1) |
| BPA-phenol (US\$/ton) | 327 | 369 | (11.4) | 269 | 21.6 |
| PTTAC | | | | | |
| ACN-propylene (US\$/ton) | 428 | 681 | (37.2) | 348 | 23.0 |
| MMA-naphtha (US\$/ton) | 902 | 920 | (2.0) | 928 | (2.8) |
| Note for PTTGC's olefins | | | | | |
| HDPE price (US\$/ton) | 1,022 | 1,034 | (1.2) | 1,032 | (1.0) |
| LLDPE price (US\$/ton) | 975 | 999 | (2.4) | 991 | (1.6) |
| LDPE price (US\$/ton) | 1,005 | 1,110 | (9.5) | 993 | 1.2 |
| HDPE-ethane (US\$/ton) | 615 | 617 | (0.3) | 622 | (1.1) |
| LLDPE-ethane (US\$/ton) | 568 | 582 | (2.4) | 581 | (2.3) |
| LDPE-ethane (US\$/ton) | 598 | 693 | (13.7) | 583 | 2.6 |

Source: Company data, KGI Securities Research

Figure 3: Sensitivity of impact between PTT and PTTGC from the new Single Pool Gas Price structure (we expect PTT to absorb the full Bt13.6bn impact for this year.)

| Case | Proportion of impact | | PTT | | | PTTGC | | |
|------|----------------------|-------|---|----------------|--------------|--|----------------|--------------|
| | PTT | PTTGC | Our previous earnings forecast in 2024F (Bt mn) | Impact (Bt mn) | Downside (%) | Our current earnings forecast in 2024F (Bt mn) | Impact (Bt mn) | Downside (%) |
| 1 | 100% | 0% | 101,786 | 13,589 | 13.4% | 7,263 | 0 | 0.0% |
| 2 | 95% | 5% | 101,786 | 13,236 | 13.0% | 7,263 | 679 | 9.4% |
| 3 | 90% | 10% | 101,786 | 12,882 | 12.7% | 7,263 | 1,359 | 18.7% |
| 4 | 80% | 20% | 101,786 | 12,176 | 12.0% | 7,263 | 2,718 | 37.4% |
| 5 | 70% | 30% | 101,786 | 11,469 | 11.3% | 7,263 | 4,077 | 56.1% |
| 6 | 60% | 40% | 101,786 | 10,763 | 10.6% | 7,263 | 5,436 | 74.8% |
| 7 | 50% | 50% | 101,786 | 10,056 | 9.9% | 7,263 | 6,795 | 93.5% |

Source: Company data, KGI Securities Research

Figure 4: Key assumptions for PTTGC

| | 2021 | 2022 | 2023F | 2024F | 2025F |
|---------------------------------|-------|-------|-------|-------|-------|
| Benchmark | | | | | |
| Dubai crude (US\$/bbl) | 69 | 96 | 85 | 75 | 70 |
| Jet oil spread (US\$/bbl) | 5.8 | 30.3 | 23.0 | 20.0 | 20.0 |
| Diesel spread (US\$/bbl) | 6.7 | 34.3 | 23.0 | 20.0 | 20.0 |
| LSFO spread (US\$/bbl) | 6.1 | 13.0 | 3.5 | 5.0 | 5.0 |
| Refinery | | | | | |
| Base GRM (US\$/bbl) | 3.8 | 12.1 | 8.6 | 7.9 | 8.1 |
| Crude run (KBD) | 138 | 129 | 146 | 150 | 150 |
| Olefins | | | | | |
| HDPE-naphtha (US\$/ton) | 536 | 418 | 400 | 450 | 500 |
| LLDPE-naphtha (US\$/ton) | 554 | 423 | 400 | 450 | 500 |
| LDPE-naphtha (US\$/ton) | 870 | 643 | 400 | 450 | 500 |
| PP-naphtha (US\$/ton) | 675 | 422 | 370 | 400 | 450 |
| Olefins utilization rate (%) | 91* | 80 | 81 | 85 | 90 |
| Polymer utilization rate (%) | 103 | 98 | 102 | 104 | 104 |
| Aromatics | | | | | |
| PX-condensate (US\$/ton) | 259 | 275 | 350 | 330 | 350 |
| BZ-condensate (US\$/ton) | 318 | 198 | 210 | 220 | 230 |
| Utilization rate (%) | 99 | 88 | 91 | 95 | 95 |
| Phenol & BPA | | | | | |
| Phenol-BZ (US\$/ton) | 263 | 281 | 90 | 150 | 250 |
| BPA-phenol (US\$/ton) | 1,712 | 551 | 290 | 320 | 350 |
| PTTAC | | | | | |
| ACN-propylene (US\$/ton) | 1,273 | 697 | 500 | 600 | 700 |
| MMA-naphtha (US\$/ton) | 1,339 | 1,089 | 950 | 1,050 | 1,150 |
| Note for PTTGC's olefins | | | | | |
| HDPE price (US\$/ton) | 1,182 | 1,203 | 1,079 | 1,046 | 1,053 |
| LLDPE price (US\$/ton) | 1,200 | 1,208 | 1,079 | 1,046 | 1,053 |
| LDPE price (US\$/ton) | 1,516 | 1,428 | 1,079 | 1,046 | 1,053 |
| HDPE-ethane (US\$/ton) | 698 | 719 | 661 | 639 | 644 |
| LLDPE-ethane (US\$/ton) | 716 | 724 | 661 | 639 | 644 |
| LDPE-ethane (US\$/ton) | 1,032 | 944 | 661 | 639 | 644 |

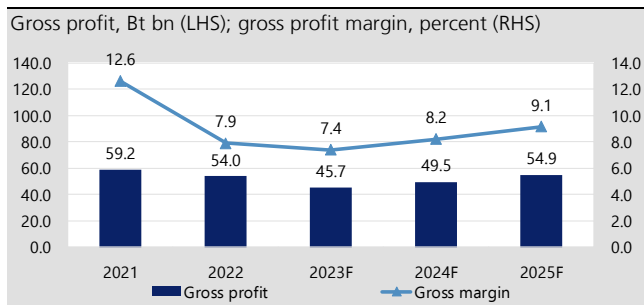
*New capacity of 500KTA ethylene and 250KTA propylene in 2021

Source: Company data, KGI Securities Research

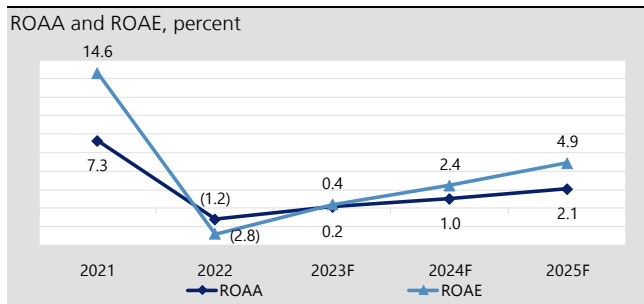
Figure 5: Company profile

PTT Global Chemical (PTTGC) was founded on October 19, 2011, through the amalgamation of PTT Chemical Public Company Limited and PTT Aromatics and Refining Public Company Limited to be the chemical flagship of PTT Group. The integration results in reaching a total Olefins and Aromatics production capacity of 8.75MTA together with 280KBD of crude oil and condensate refining capacity, making it Thailand's largest and Asia's leading integrated petrochemical and refining company.

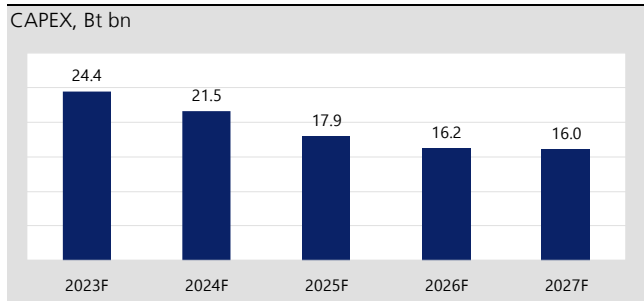
Source: Company data, KGI Securities Research

Figure 7: Gross profit


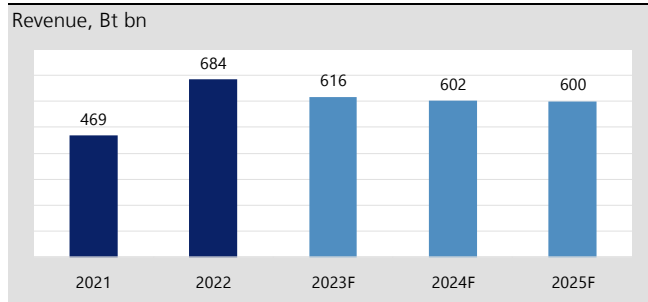
Source: Company data, KGI Securities Research

Figure 9: Company ROAA and ROAE


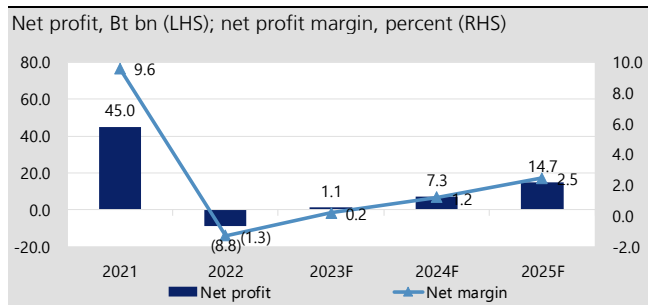
Source: Company data, KGI Securities Research

Figure 11: Five-year investment plan (2023F-2027F)


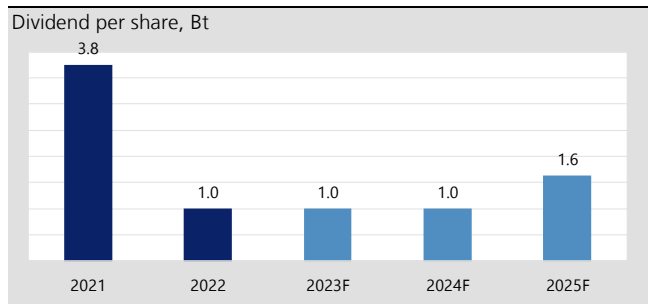
Source: Company data, KGI Securities Research

Figure 6: Revenue


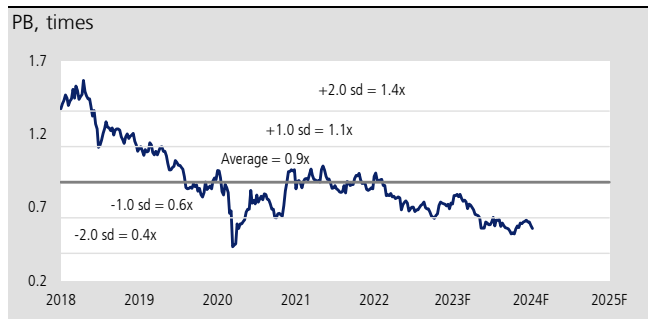
Source: Company data, KGI Securities Research

Figure 8: Net profit


Source: Company data, KGI Securities Research

Figure 10: Dividend


Source: Company data, KGI Securities Research

Figure 12: Company trading PB


Source: KGI Securities Research

Quarterly Income Statement

| (Bt mn) | Mar-21A | Jun-21A | Sep-21A | Dec-21A | Mar-22A | Jun-22A | Sep-22A | Dec-22A | Mar-23A | Jun-23A | Sep-23A | Dec-23F |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|
| Income Statement (Bt mn) | | | | | | | | | | | | |
| Revenue | 102,676 | 112,627 | 113,189 | 140,461 | 176,767 | 197,603 | 183,141 | 126,442 | 148,147 | 147,949 | 161,678 | 154,124 |
| Cost of Goods Sold | (87,920) | (96,409) | (97,421) | (128,033) | (156,957) | (171,442) | (179,713) | (121,840) | (138,948) | (142,652) | (145,548) | (146,243) |
| Gross Profit | 14,756 | 16,218 | 15,768 | 12,428 | 19,810 | 26,161 | 3,428 | 4,603 | 9,199 | 5,297 | 16,130 | 7,881 |
| Operating Expenses | (3,955) | (4,417) | (4,998) | (8,357) | (9,652) | (9,139) | (9,328) | (10,854) | (8,471) | (8,482) | (8,645) | (8,900) |
| Other incomes | 408 | 10,928 | 567 | 433 | 811 | 818 | 591 | 1,725 | 680 | 1,321 | 1,516 | 2,435 |
| Operating Profit | 11,209 | 22,729 | 11,338 | 4,503 | 10,970 | 17,840 | (5,310) | (4,526) | 1,408 | (1,864) | 9,001 | 1,416 |
| Depreciation of fixed assets | 5,458 | 5,589 | 5,837 | 5,854 | 6,809 | 6,732 | 7,027 | 6,995 | 6,965 | 7,032 | 7,200 | 7,200 |
| Operating EBITDA | 16,666 | 28,318 | 17,175 | 10,357 | 17,778 | 24,572 | 1,717 | 2,470 | 8,373 | 5,168 | 16,201 | 8,616 |
| Non-Operating Income | 0 | 0 | 0 | 1,270 | 0 | 0 | 0 | 0 | 555 | 1,706 | 0 | 963 |
| Interest Income | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Non-op Income | 0 | 0 | 0 | 1,270 | 0 | 0 | 0 | 0 | 555 | 1,706 | 0 | 963 |
| Non-Operating Expenses | (1,915) | (3,587) | (6,128) | (1,528) | (9,603) | (13,450) | (3,723) | (6,084) | (2,786) | (2,885) | (4,936) | (3,000) |
| Interest Expenses | (1,184) | (1,530) | (1,704) | (1,528) | (2,101) | (2,428) | (2,741) | (2,566) | (2,786) | (2,885) | (2,999) | (3,000) |
| Other Non-op Expenses | (731) | (2,057) | (4,424) | 0 | (7,503) | (11,022) | (982) | (3,519) | 0 | 0 | (1,937) | 0 |
| Net Investment Income/(Loss) | 1,893 | 2,324 | 1,154 | 1,471 | 1,142 | 1,549 | 250 | 555 | (244) | (408) | (263) | 191 |
| Pre-tax Profit | 11,187 | 21,466 | 6,363 | 5,716 | 2,509 | 5,939 | (8,783) | (10,055) | (1,068) | (3,451) | 3,802 | (430) |
| Current Taxation | (721) | (5,591) | (727) | (190) | (38) | 255 | 28 | 2,028 | 43 | 271 | (467) | (918) |
| Minorities | 132 | 141 | 233 | 61 | 470 | 438 | 200 | 9 | (23) | (16) | (30) | (15) |
| Extraordinary items | (639) | 9,300 | 1,602 | (2,217) | 595 | (4,378) | (4,449) | 8,714 | 1,085 | (2,427) | (1,938) | 5,856 |
| Net Profit | 9,695 | 25,035 | 7,005 | 3,248 | 2,596 | 1,378 | (13,404) | 678 | 82 | (5,591) | 1,427 | 4,523 |
| EPS (Bt) | 2.15 | 5.55 | 1.55 | 0.72 | 0.58 | 0.31 | (2.97) | 0.15 | 0.02 | (1.24) | 0.32 | 1.00 |
| Margins | | | | | | | | | | | | |
| Gross profit margin | 14.4 | 14.4 | 13.9 | 8.8 | 11.2 | 13.2 | 1.9 | 3.6 | 6.2 | 3.6 | 10.0 | 5.1 |
| Operating EBIT margin | 10.9 | 20.2 | 10.0 | 3.2 | 6.2 | 9.0 | (2.9) | (3.6) | 1.0 | (1.3) | 5.6 | 0.9 |
| Operating EBITDA margin | 16.2 | 25.1 | 15.2 | 7.4 | 10.1 | 12.4 | 0.9 | 2.0 | 5.7 | 3.5 | 10.0 | 5.6 |
| Net profit margin | 9.4 | 22.2 | 6.2 | 2.3 | 1.5 | 0.7 | (7.3) | 0.5 | 0.1 | (3.8) | 0.9 | 2.9 |
| Growth | | | | | | | | | | | | |
| Revenue growth | 9.5 | 61.0 | 46.7 | 59.0 | 72.2 | 75.4 | 61.8 | (10.0) | (16.2) | (25.1) | (11.7) | 21.9 |
| Operating EBIT growth | N.A. | 2,238.0 | 657.8 | (23.7) | (2.1) | (21.5) | N.A. | N.A. | (87.2) | N.A. | N.A. | N.A. |
| Operating EBITDA growth | N.A. | 372.8 | 161.2 | (7.4) | 6.7 | (13.2) | (90.0) | (76.2) | (52.9) | (79.0) | 843.6 | 248.9 |
| Net profit growth | N.A. | 1,398.4 | 671.2 | (49.3) | (73.2) | (94.5) | N.A. | (79.1) | (96.8) | N.A. | N.A. | 567.2 |

Source: Company data, KGI Securities Research

Balance Sheet

| As of 31 Dec (Bt mn) | 2021 | 2022 | 2023F | 2024F | 2025F |
|------------------------------|----------------|----------------|----------------|----------------|----------------|
| Total Assets | 747,481 | 719,965 | 719,024 | 706,727 | 702,293 |
| Current Assets | 209,092 | 172,009 | 182,807 | 185,252 | 199,362 |
| Cash & ST Investments | 74,994 | 31,963 | 48,609 | 54,342 | 69,467 |
| Inventories | 71,553 | 76,619 | 68,764 | 66,575 | 65,701 |
| Accounts Receivable | 50,540 | 45,254 | 47,261 | 46,161 | 46,020 |
| Others | 12,004 | 18,173 | 18,173 | 18,173 | 18,173 |
| Non-current Assets | 538,389 | 547,957 | 536,217 | 521,475 | 502,931 |
| LT Investments | 80,780 | 87,311 | 87,311 | 87,311 | 87,311 |
| Net fixed Assets | 301,042 | 296,321 | 292,561 | 285,400 | 274,058 |
| Others | 156,567 | 164,325 | 156,345 | 148,764 | 141,563 |
| Total Liabilities | 419,878 | 421,138 | 423,578 | 408,527 | 396,724 |
| Current Liabilities | 147,003 | 103,976 | 107,534 | 103,545 | 102,750 |
| Accounts Payable | 70,111 | 57,613 | 62,512 | 60,523 | 59,728 |
| ST Borrowings | 41,877 | 15,613 | 14,272 | 12,272 | 12,272 |
| Others | 35,015 | 30,750 | 30,750 | 30,750 | 30,750 |
| Long-term Liabilities | 272,875 | 317,161 | 316,044 | 304,982 | 293,973 |
| Long-term Debts | 233,497 | 286,241 | 285,124 | 274,062 | 263,053 |
| Others | 39,377 | 30,920 | 30,920 | 30,920 | 30,920 |
| Shareholders' Equity | 327,603 | 298,828 | 295,446 | 298,201 | 305,570 |
| Common Stock | 45,088 | 45,088 | 45,088 | 45,088 | 45,088 |
| Capital Surplus | 51,533 | 41,165 | 41,165 | 41,165 | 41,165 |
| Retained Earnings | 230,982 | 212,574 | 209,193 | 211,947 | 219,316 |
| Preferred Stock | 0 | 0 | 0 | 0 | 0 |

Source: KGI Securities Research

Key Ratios

| Year to 31 Dec (Bt mn) | 2021 | 2022 | 2023F | 2024F | 2025F |
|----------------------------------|----------|---------|---------|---------|---------|
| Forecast Drivers | | | | | |
| Growth (% YoY) | | | | | |
| Sales | 42.4 | 45.8 | (9.9) | (2.3) | (0.3) |
| OP | N.A. | (61.9) | (25.3) | 25.7 | 28.7 |
| EBITDA | 241.9 | (37.0) | (18.4) | 16.5 | 17.6 |
| NP | 22,435.5 | N.A. | N.A. | 544.2 | 102.9 |
| EPS | 22,435.5 | N.A. | N.A. | 544.2 | 102.9 |
| Profitability (%) | | | | | |
| Gross Margin | 12.6 | 7.9 | 7.4 | 8.2 | 9.1 |
| Operating Margin | 10.6 | 2.8 | 2.3 | 3.0 | 3.8 |
| EBITDA Margin | 16.9 | 7.3 | 6.6 | 7.9 | 9.3 |
| Net Profit Margin | 9.6 | (1.3) | 0.2 | 1.2 | 2.5 |
| ROAA | 7.3 | (1.2) | 0.2 | 1.0 | 2.1 |
| ROAE | 14.6 | (2.8) | 0.4 | 2.4 | 4.9 |
| Stability | | | | | |
| Gross Debt/Equity (%) | 84.1 | 101.0 | 101.3 | 96.0 | 90.1 |
| Net Debt/Equity (%) | 61.2 | 90.3 | 84.9 | 77.8 | 67.4 |
| Interest Coverage (x) | 9.8 | (0.1) | 1.1 | 1.7 | 2.5 |
| Interest & ST Debt Coverage (x) | 1.2 | (0.0) | 0.5 | 0.8 | 1.2 |
| Cash Flow Interest Coverage (x) | 11.5 | (0.3) | 3.4 | 3.3 | 4.1 |
| Cash Flow/Interest & ST Debt (x) | 1.4 | (0.1) | 1.5 | 1.6 | 1.9 |
| Current Ratio (x) | 1.4 | 1.7 | 1.7 | 1.8 | 1.9 |
| Quick Ratio (x) | 0.9 | 0.9 | 1.1 | 1.1 | 1.3 |
| Net Debt (Bt mn) | 200,381 | 269,892 | 250,787 | 231,992 | 205,858 |
| Per Share Data (Bt) | | | | | |
| EPS | 10.0 | (1.9) | 0.3 | 1.6 | 3.3 |
| CFPS | 15.2 | (0.8) | 8.6 | 8.0 | 9.6 |
| BVPS | 70.6 | 64.6 | 63.9 | 64.5 | 66.1 |
| SPS | -- | -- | -- | -- | -- |
| EBITDA/Share | 17.6 | 11.1 | 9.1 | 10.5 | 12.4 |
| DPS | 3.8 | 1.0 | 1.0 | 1.0 | 1.6 |
| Activity | | | | | |
| Asset Turnover (x) | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 |
| Days Receivables | 39.3 | 24.2 | 28.0 | 28.0 | 28.0 |
| Days Inventory | 63.7 | 44.4 | 44.0 | 44.0 | 44.0 |
| Days Payable | 17.1 | 9.1 | 11.0 | 11.0 | 11.0 |
| Cash Cycle | 86.0 | 59.4 | 61.0 | 61.0 | 61.0 |

Source: KGI Securities Research

Profit & Loss

| Year to 31 Dec (Bt mn) | 2021 | 2022 | 2023F | 2024F | 2025F |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Revenue | 468,953 | 683,954 | 616,079 | 601,747 | 599,910 |
| Cost of Goods Sold | (409,783) | (629,952) | (570,426) | (552,271) | (545,022) |
| Gross Profit | 59,170 | 54,002 | 45,653 | 49,476 | 54,888 |
| Operating Expenses | (21,727) | (38,973) | (35,076) | (35,427) | (35,781) |
| Other Incomes | 12,336 | 3,946 | 3,592 | 3,763 | 3,825 |
| Operating Profit | 49,779 | 18,975 | 14,169 | 17,813 | 22,932 |
| Depreciation of fixed assets | 22,738 | 27,563 | 28,114 | 28,676 | 29,250 |
| Operating EBITDA | 72,517 | 46,537 | 42,283 | 46,489 | 52,182 |
| Non-Operating Income | 0 | 0 | 0 | 0 | 0 |
| Interest Income | 0 | 0 | 0 | 0 | 0 |
| Other Non-op Income | 0 | 0 | 0 | 0 | 0 |
| Non-Operating Expenses | (11,887) | (32,861) | (11,463) | (10,965) | (10,550) |
| Interest Expenses | (5,945) | (9,835) | (11,463) | (10,965) | (10,550) |
| Other Non-op Expenses | (5,942) | (23,025) | 0 | 0 | 0 |
| Net Investment Income/(Loss) | 6,841 | 3,496 | (1,453) | 1,070 | 3,738 |
| Pre-tax Profit | 44,732 | (10,390) | 1,254 | 7,918 | 16,121 |
| Current Taxation | (7,228) | 2,273 | (100) | (633) | (1,290) |
| Minorities | 568 | 1,116 | 26 | 21 | 93 |
| Extraordinary items | 8,046 | 481 | 0 | 0 | 0 |
| Net Profit | 44,982 | (8,752) | 1,127 | 7,263 | 14,739 |
| EPS (Bt) | 9.98 | (1.94) | 0.25 | 1.61 | 3.27 |

Source: KGI Securities Research

Cash Flow

| Year to 31 Dec (Bt mn) | 2021 | 2022 | 2023F | 2024F | 2025F |
|-----------------------------|-----------|----------|----------|----------|----------|
| Operating Cash Flow | 68,650 | (3,426) | 38,871 | 36,176 | 43,200 |
| Net Profit | 44,982 | (8,752) | 1,127 | 7,263 | 14,739 |
| Depreciation & Amortization | 22,738 | 27,563 | 28,114 | 28,676 | 29,250 |
| Change in Working Capital | (9,375) | (12,276) | 10,747 | 1,298 | 220 |
| Others | 10,305 | (9,961) | (1,118) | (1,062) | (1,009) |
| Investment Cash Flow | (148,843) | (12,213) | (16,374) | (13,934) | (10,706) |
| Net CAPEX | (16,074) | (21,372) | (24,354) | (21,515) | (17,908) |
| Change in LT Investment | 0 | 0 | 0 | 0 | 0 |
| Change in Other Assets | (132,769) | 9,159 | 7,980 | 7,581 | 7,202 |
| Free Cash Flow | 52,576 | (24,798) | 14,517 | 14,661 | 25,293 |
| Financing Cash Flow | 91,494 | (14,035) | (5,850) | (16,509) | (17,369) |
| Change in Share Capital | 10,235 | (10,368) | 0 | 0 | 0 |
| Net Change in Debt | 116,722 | 12,530 | (1,341) | (12,000) | (10,000) |
| Change in Other LT Liab. | (35,464) | (16,197) | (4,509) | (4,509) | (7,369) |
| Net Cash Flow | 11,300 | (29,674) | 16,647 | 5,733 | 15,125 |

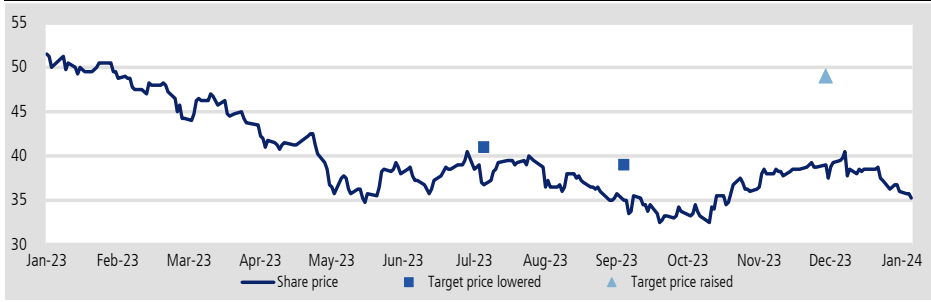
Source: KGI Securities Research

Rates of Return on Invested Capital

| Year 1- | COGS Revenue | + Depreciation Revenue | + Operating Exp. Revenue | = Operating Margin |
|---------|----------------------------|---------------------------|-----------------------------|---------------------------------------|
| 2021 | 82.5% | 4.8% | 4.6% | 8.0% |
| 2022 | 88.1% | 4.0% | 5.7% | 2.2% |
| 2023F | 88.0% | 4.6% | 5.7% | 1.7% |
| 2024F | 87.0% | 4.8% | 5.9% | 2.3% |
| 2025F | 86.0% | 4.9% | 6.0% | 3.2% |
| Year 1/ | Working Capital Revenue | + Net PPE Revenue | + Other Assets Revenue | = Capital Turnover |
| 2021 | 0.13 | 0.64 | 0.33 | 0.90 |
| 2022 | 0.10 | 0.43 | 0.24 | 1.29 |
| 2023F | 0.12 | 0.47 | 0.25 | 1.18 |
| 2024F | 0.14 | 0.47 | 0.25 | 1.17 |
| 2025F | 0.16 | 0.46 | 0.24 | 1.17 |
| Year | Operating Margin | x Capital Turnover | x Cash Tax Rate | = After-tax Return on Inv. Capital |
| 2021 | 8.0% | 0.9 | 86.2 | 6.2 |
| 2022 | 2.2% | 1.3 | 79.4 | 2.3 |
| 2023F | 1.7% | 1.2 | 91.8 | 1.9 |
| 2024F | 2.3% | 1.2 | 92.0 | 2.5 |
| 2025F | 3.2% | 1.2 | 100.0 | 3.7 |

Source: KGI Securities Research

PTT Global Chemical - Recommendation & target price history



Source: KGI Securities Research

Company's ESG details

Environment

- PTTGC has established the One Water Strategy, which promotes integrated water management, enhances water efficiency in the production process, utilizes renewable water, supports investment in technology, streamlines the production process, and secure alternative sources of water supply.
- PTTGC prioritizes on reducing the impact of air emissions, especially the reduction of diffusion and leakage of Volatile Organic Compounds (VOCs) from the production process. Consequently, PTTGC has developed and improved the efficiency of production process, as well as set up monitoring plan and constantly perform a maintenance on machines and related equipment. In addition, PTTGC has also selected advanced and high-performance equipment and technologies, in order to minimize the impact on the environment and the health of our operators and surrounding communities. The company has also applied advanced environmental-friendly innovation and technology to continuously improve PTTGC's air quality control system.
- PTTGC places considerable emphasis on maximizes the cycle of resource utilization, allow the use of "Renewable Resource" and "Re-Material" (resource from used products) in the production process instead of using limited existing resource, and reduces as much waste as possible throughout the entire production process. This is where the Circular Economy Concept comes into play in the difference operation process of the industrial sector. Besides, PTTGC considers sustainability as a core business priority and an integral part of the corporate strategy. Accordingly, PTTGC has applied the Circular Economy Concept to consider and set the company business plan, optimize the use of resources, reduce waste generation, and reduce impacts to the environment.

Social

- The assessment of operators' safety risks as well as statistics on accidents and injuries have indicated that the majority injuries occur to their hands and fingers. Consequently, PTTGC has initiated the Hand Injuries Awareness Program since 2017. This program focuses on raising employee awareness on accidents and collaborating with contractors to develop appropriate working tools to reduce the injury rate of employees and contractors. PTTGC has applied engineering control principles to improve protection from injuries by developing hand injury protective tools, such as wrenches with straps and slugging wrenches with spring handle. Moreover, PTTGC has published a user manual for operators as a guideline to selecting the suitable tool for the job.
- In parallel with our business operation, PTTGC supports and contributes to the improvement of local communities in order to create balance in conducting business, respond to the expectations of stakeholders as well as protect and reduce environmental and social impacts. PTTGC commits to create shared business value with local communities and the society. We also focus on building relationship and engagement with all sectors. In order to achieve these goals, PTTGC applies our innovation and expertise to CSR projects and activities, which align with the circular economy concept. Such projects improve the quality of life and economy for the people in the community surrounding our operating sites in tandem with resolving environmental issues concerning water shortage and plastic waste management.
- PTTGC has drawn up a career path and launched the Learning and Development Programs for all employees by determining the functional and leadership competencies necessary for each job position and each working level in order to develop their capability to correspond to the company's goals and human resource development strategy. PTTGC has also established a Succession Plan to select an appropriate replacement, who possesses necessary qualifications and is a role model in corporate culture, for each job position.

Governance

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

Climate Management (Being the subset of Environment)

- PTTGC has a clear roadmap and are increasing our medium-term targets to reduce by 20% within 2030 on the journey to achieving Net Zero by 2050 in line with the Paris Agreement. PTTGC is propelling our customers and suppliers to participate in this commitment together. Moreover, PTTGC looks forward to continued engagement with various players in the global markets. With this regard, it is PTTGC's best interest that the roadmap of the Low Carbon Transition Framework has included activities of engagement with relevant stakeholders, which is also aligned with the ambition of Paris Agreement, to push forward the company to achieve low carbon business.
- PTTGC Group, led by GC Estate, joined the sustainable Eco-Forest Rayong Wanarom plantation project to increase carbon sequestration at the Asia Industrial Estate, Ban Chang sub-district, Ban Chang district, Rayong province. A survey indicated that the plantation area, which consists of an 80-rai plot, can store 1,270 tons of carbon dioxide equivalent.

Source: Company data, KGI Securities Research

SET ESG Ratings

| Stock | Company name | SET ESG Ratings | Stock | Company name | SET ESG Ratings |
|--------|-------------------------------------|-----------------|--------|--|-----------------|
| ADVANC | ADVANCED INFO SERVICE | AAA | KTC | KRUNGTHAI CARD | AAA |
| AMATA | AMATA CORPORATION | AAA | LH | LAND AND HOUSES | A |
| AOT | AIRPORTS OF THAILAND | A | MAJOR | MAJOR CINEPLEX GROUP | AA |
| AP | AP (THAILAND) | AA | MEGA | MEGA LIFESCIENCES | A |
| BAFS | BANGKOK AVIATION FUEL SERVICES PCL. | AA | MINT | MINOR INTERNATIONAL | AA |
| BAM | BANGKOK COMMERCIAL ASSET MANAGEMEN | AA | MTC | MUANGTHAI CAPITAL | A |
| BANPU | BANPU | AAA | OR | PTT OIL AND RETAIL BUSINESS | AAA |
| BBGI | BBGI | AA | ORI | ORIGIN PROPERTY | AA |
| BBL | BANGKOK BANK | AA | OSP | OSOTSPA | AA |
| BCH | BANGKOK CHAIN HOSPITAL | AA | PLANB | PLAN B MEDIA | AA |
| BCP | BANGCHAK CORPORATION | AAA | PSH | PRUKSA HOLDING | BBB |
| BCPG | BCPG | AA | PTT | PTT | AAA |
| BDMS | BANGKOK DUSIT MEDICAL SERVICES | AA | PTTEP | PTT EXPLORATION AND PRODUCTION | AAA |
| BEM | BANGKOK EXPRESSWAY AND METRO | AA | PTTGC | PTT GLOBAL CHEMICAL | AAA |
| BGRIM | B.GRIMM POWER | AAA | RATCH | RATCH GROUP | AA |
| BPP | BANPU POWER | AAA | RBF | R&B FOOD SUPPLY | BBB |
| BTS | BTS GROUP HOLDINGS | AA | SAK | SAKSIAM LEASING | A |
| CBG | CARABAO GROUP | A | SAPPE | SAPPE | BBB |
| CENTEL | CENTRAL PLAZA HOTEL | A | SAT | SOMBOON ADVANCE TECHNOLOGY | AA |
| CK | CH. KARNCHANG | A | SAWAD | SRISAWAD CORPORATION | BBB |
| CKP | CK POWER | AAA | SCB | SCB X | AA |
| COM7 | COM7 | A | SCC | THE SIAM CEMENT | AAA |
| CPALL | CP ALL | AAA | SCCC | SIAM CITY CEMENT | AA |
| CPAXT | CP AXTRA | AAA | SCGP | SCG PACKAGING | AAA |
| CPF | CHAROEN POKPHAND FOODS | AAA | SHR | S HOTELS AND RESORTS | A |
| CPN | CENTRAL PATTANA | AA | SICT | SILICON CRAFT TECHNOLOGY | A |
| EGCO | ELECTRICITY GENERATING | AA | SMPC | SAHAMITR PRESSURE CONTAINER | AA |
| ERW | THE ERWAN GROUP | A | SNC | SNC FORMER | A |
| GFPT | GFPT | BBB | SPALAI | SUPALAI | AA |
| GLOBAL | SIAM GLOBAL HOUSE | AA | STEC | SINO-THAI ENGINEERING AND CONSTRUCTION | A |
| GPSC | GLOBAL POWER SYNERGY | AA | STGT | SRI TRANG GLOVES (THAILAND) | AAA |
| GULF | GULF ENERGY DEVELOPMENT | AA | TCAP | THANACHART CAPITAL | A |
| HANA | HANA MICROELECTRONICS | AA | TFG | THAIFOODS GROUP | A |
| HENG | HENG LEASING AND CAPITAL | A | THCOM | THAICOM | AAA |
| HMPRO | HOME PRODUCT CENTER | AA | TISCO | TISCO FINANCIAL GROUP | AAA |
| INTUCH | INTOUCH HOLDINGS | AA | TOP | THAI OIL | AAA |
| IRPC | IRPC | AA | TTB | TMBTHANACHART BANK | AA |
| IVL | INDORAMA VENTURES | AA | UBE | UBON BIO ETHANOL | A |
| KBANK | KASIKORNBANK | AAA | VGI | VGI | AA |
| KEX | KERRY EXPRESS (THAILAND) | BBB | WHA | WHA CORPORATION | AAA |
| KKP | KIATNAKIN PHATRA BANK | BBB | WHAUP | WHA UTILITIES AND POWER | AAA |
| KTB | KRUNG THAI BANK | AAA | ZEN | ZEN CORPORATION GROUP | AA |

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 | GLOBAL | SIAM GLOBAL HOUSE | RATCH | RATCH GROUP |
| ADVANC | ADVANCED INFO SERVICE | GPSC | GLOBAL POWER SYNERGY | RBF | R&B FOOD SUPPLY |
| AMA | AMA MARINE | GULF | GULF ENERGY DEVELOPMENT | SAT | SOMBOON ADVANCE TECHNOLOGY |
| AMATA | AMATA CORPORATION | HANA | HANA MICROELECTRONICS | SCB | SCB X |
| ANAN | ANANDA DEVELOPMENT | HENG | HENG LEASING AND CAPITAL | SCC | THE SIAM CEMENT |
| AOT | AIRPORTS OF THAILAND | HMPRO | HOME PRODUCT CENTER | SCCC | SIAM CITY CEMENT |
| AP | AP (THAILAND) | INTUCH | INTOUCH HOLDINGS | SCGP | SCG PACKAGING |
| BAFS | BANGKOK AVIATION FUEL SERVICES PCL. | IRPC | IRPC | SEAFECO | SEAFECO |
| BAM | BANGKOK COMMERCIAL ASSET MANAGEMENT | IVL | INDORAMA VENTURES | SHR | S HOTELS AND RESORTS |
| BANPU | BANPU | KBANK | KASIKORNBANK | SICT | SILICON CRAFT TECHNOLOGY |
| BBL | BANGKOK BANK | KCE | KCE ELECTRONICS | SMPC | SAHAMITR PRESSURE CONTAINER |
| BCP | BANGCHAK CORPORATION | KEX | KERRY EXPRESS (THAILAND) | SNC | SNC FORMER |
| BCPG | BCPG | KKP | KIATNAKIN PHATRA BANK | SPALI | SUPALAI |
| BDMS | BANGKOK DUSIT MEDICAL SERVICES | KTB | KRUNG THAI BANK | SPRC | STAR PETROLEUM REFINING |
| BEM | BANGKOK EXPRESSWAY AND METRO | KTC | KRUNGTHAI CARD | STEC | SINO-THAI ENGINEERING AND CONSTRUCTION |
| BGRIM | B.GRIMM POWER | LPN | L.P.N. DEVELOPMENT | STGT | SRI TRANG GLOVES (THAILAND) |
| BPP | BANPU POWER | MAJOR | MAJOR CINEPLEX GROUP | SUN | SUNSWEEET |
| BTS | BTS GROUP HOLDINGS | MBK | MBK | SVI | SVI |
| CENDEL | CENTRAL PLAZA HOTEL | MINT | MINOR INTERNATIONAL | TACC | T.A.C. CONSUMER |
| CK | CH. KARNCHANG | MTC | MUANGTHAI CAPITAL | TCAP | THANACHART CAPITAL |
| CKP | CK POWER | OR | PTT OIL AND RETAIL BUSINESS | THCOM | THAICOM |
| COM7 | COM7 | ORI | ORIGIN PROPERTY | TISCO | TISCO FINANCIAL GROUP |
| CPALL | CP ALL | OSP | OSOTSPA | TKN | TAOKAENOI FOOD & MARKETING |
| CPAXT | CP AXTRA | PLANB | PLAN B MEDIA | TOP | THAI OIL |
| CPF | CHAROEN POKPHAND FOODS | PSH | PRUKSA HOLDING | TTB | TMBTHANACHART BANK |
| CPN | CENTRAL PATTANA | PTG | PTG ENERGY | TU | THAI UNION GROUP |
| DELTA | DELTA ELECTRONICS (THAILAND) | PTT | PTT | VGI | VGI |
| DOHOM | DOHOME | PTTEP | PTT EXPLORATION AND PRODUCTION | WHA | WHA CORPORATION |
| EGCO | ELECTRICITY GENERATING | PTTGC | PTT GLOBAL CHEMICAL | WHAUP | WHA UTILITIES AND POWER |
| GFPT | GFPT | PYLON | PYLON | ZEN | ZEN CORPORATION GROUP |
| GGC | GLOBAL GREEN CHEMICALS | QH | QUALITY HOUSES | | |



Companies with Very Good CG Scoring

| Stock | Company name | Stock | Company name | Stock | Company name |
|--------|------------------------------|--------|----------------------|--------|-----------------------|
| AEONTS | AEON THANA SINSAP (THAILAND) | JMT | JMT NETWORK SERVICES | SFT | SHRINKFLEX (THAILAND) |
| BCH | BANGKOK CHAIN HOSPITAL | LH | LAND AND HOUSES | SINGER | SINGER THAILAND |
| BEC | BEC WORLD | M | MK RESTAURANT GROUP | SMD | SAINTMED |
| BH | BUMRUNGRAD HOSPITAL | MEGA | MEGA LIFESCIENCES | SNNP | SRINANAPORN MARKETING |
| CBG | CARABAO GROUP | NETBAY | NETBAY | SPA | SIAM WELLNESS GROUP |
| CHG | CHULARAT HOSPITAL | PJW | PANJAWATTANA PLASTIC | TFG | THAIFOODS GROUP |
| ERW | THE ERAWAN GROUP | SAK | SAKSIAM LEASING | TIDLOR | NGERN TID LOR |
| ESSO | ESSO (THAILAND) | SAPPE | SAPPE | TNP | THANAPIRIYA |
| HUMAN | HUMANICA | SAWAD | SRISAWAD CORPORATION | UBE | UBON BIO ETHANOL |
| IIG | I&I GROUP | SFLEX | STARFLEX | XO | EXOTIC FOOD |



Companies with Good CG Scoring

| Stock | Company name | Stock | Company name | Stock | Company name |
|-------|------------------------|-------|--------------------------|-------|-------------------|
| AU | AFTER YOU | LPH | LADPRAO GENERAL HOSPITAL | TPCH | TPC POWER HOLDING |
| EKH | EKACHAI MEDICAL CARE | MENA | MENA TRANSPORT | | |
| JMART | JAYMART GROUP HOLDINGS | SISB | SISB | | |

Companies classified Not in the three highest score groups

| Stock | Company name | Stock | Company name | Stock | Company name |
|-------|--------------------|-------|------------------------|-------|-----------------------|
| BBGI | BBGI | NTSC | Nutrition SC | TGE | THACHANG GREEN ENERGY |
| BTG | BETAGRO | PLT | Pilatus Marine | | |
| ITC | i-Tail Corporation | PQS | Premier Quality Starch | | |

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

Level 5: Extended

| Stock | Company name | Stock | Company name | Stock | Company name |
|--------|--------------------------------|--------|------------------------------|--------|---|
| ADVANC | ADVANCED INFO SERVICE | GLOBAL | SIAM GLOBAL HOUSE | QH | QUALITY HOUSES |
| ANAN | ANANDA DEVELOPMENT | GPSC | GLOBAL POWER SYNERGY | RATCH | RATCHABURI ELECTRICITY GENERATING HOLDING |
| BBL | BANGKOK BANK | HMPRO | HOME PRODUCT CENTER | ROBINS | ROBINSON DEPARTMENT STORE |
| BCH | BANGKOK CHAIN HOSPITAL | IRPC | IRPC | SCC | THE SIAM CEMENT |
| BDMS | BANGKOK DUSIT MEDICAL SERVICES | KBANK | KASIKORN BANK | SIRI | SANSIRI |
| BIGC | BIG C SUPERCENTER | KCE | KCE ELECTRONICS | SPALI | SUPALAI |
| CK | CH. KARNCHANG | KKP | KIATNAKIN BANK | STEC | SINO-THAI ENGINEERING AND CONSTRUCTION |
| DCC | DYNASTY CERAMIC | KTB | KRUNG THAI BANK | TCAP | THANACHART CAPITAL |
| DELTA | DELTA ELECTRONICS (THAILAND) | LPH | LADPRAO GENERAL HOSPITAL | TISCO | TISCO FINANCIAL GROUP |
| DRT | DIAMOND ROOFING TILES | PACE | PACE DEVELOPMENT CORPORATION | TMT | THAI METAL TRADE |
| EGCO | ELECTRICITY GENERATING | PTT | PTT | TOP | THAI OIL |
| GFPT | GFPT | PTTGC | PTT GLOBAL CHEMICAL | | |

Level 4: Certified

| Stock | Company name | Stock | Company name | Stock | Company name |
|--------|----------------------------|--------|--------------------------------|---------|----------------------------|
| AAV | ASIA AVIATION | ERW | THE ERAWAN GROUP | SAPPE | SAPPE |
| AP | ASIAN PROPERTY DEVELOPMENT | GLOW | GLOW ENERGY | SAWAD | SRISAWAD POWER 1979 |
| BA | BANGKOK AIRWAYS | GUNKUL | GUNKUL ENGINEERING | SCB | THE SIAM COMMERCIAL BANK |
| BANPU | BANPU | ILINK | INTERLINK COMMUNICATION | SCN | SCAN INTER |
| BCP | THE BANGCHAK PETROLEUM | KTC | KRUNGTHAI CARD | SEAFSCO | SEAFSCO |
| BH | BUMRUNGRAD HOSPITAL | LH | LAND AND HOUSES | SVI | SVI |
| BJCHI | BJC HEAVY INDUSTRIES | LPN | L.P.N. DEVELOPMENT | TASCO | TIPCO ASPHALT |
| CBG | CARABAO GROUP | MAKRO | SIAM MAKRO | TKN | TAOKAENOI FOOD & MARKETING |
| CENDEL | CENTRAL PLAZA HOTEL | MALEE | MALEE SAMPRAN | TMB | TMB BANK |
| CHG | CHULARAT HOSPITAL | MINT | MINOR INTERNATIONAL | TRT | TIRATHAI |
| CKP | CK POWER | MODERN | MODERNFORM GROUP | TRUE | TRUE CORPORATION |
| CPF | CHAROEN POKPHAND FOODS | NOK | NOK AIRLINES | TVO | THAI VEGETABLE OIL |
| CPN | CENTRAL PATTANA | PTTEP | PTT EXPLORATION AND PRODUCTION | | |
| DTAC | TOTAL ACCESS COMMUNICATION | PYLON | PYLON | | |

Level 3: Established

| Stock | Company name | Stock | Company name | Stock | Company name |
|-------|------------------------------|-------|-------------------|-------|-------------------------|
| BEM | BANGKOK EXPRESSWAY AND METRO | MTLS | MUANGTHAI LEASING | SPRC | STAR PETROLEUM REFINING |
| CPALL | CP ALL | SCI | SCI ELECTRIC | | |

No progress

| Stock | Company name | Stock | Company name | Stock | Company name |
|-------|----------------------|-------|--------------------|-------|-------------------|
| AOT | AIRPORTS OF THAILAND | BPP | BANPU POWER | FN | FN FACTORY OUTLET |
| BPCG | BPCG | BTS | BTS GROUP HOLDINGS | TPCH | TPC POWER HOLDING |

Source: www.cgthailand.org

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KGI Locations

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KGI's Ratings

| Rating | Definition |
|-------------------|---|
| 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. |

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