

Key message

ราคาน้ำมันคิบคูไบทรงตัว WoW อยู่ที่ US\$76.0/ьы เมื่อวัน ศุกร์ที่แล้ว แต่ดีคตัวขึ้นเล็กน้อยในช่วงต้นสัปดาห์นี้ จาก ความกลัววาอุปทานจะถูกกระทบหลังจากที่กองกำลังกลุ่ม ของเยเมนโจมตีเรือพาณิชย์สองลำในทะเลแคง นอกจากนี้ รัสเซียยังบอกว่าจะลดการส่งออกน้ำมันดิบลง อีกประมาณ 50KBD ในเดือนธันวาคม เร็วกว่าที่สัญญา เอาไว้ สำหรับตลาดโรงกลั่น spread ของน้ำมันเบนซิน เพิ่มขึ้น 9% WoW เป็น US\$14.4/bbl เนื่องจาก i) สูต็อก น้ำมันเบนซินในสิงคโปร์ลคลง และ ii) การส่งออกน้ำมัน จากเกาหลีใต้ลดลง หลังจากที่รัฐบาลขยายการอดหนน น้ำมันเชื้อเพลิงออกไปอีกสองเคือน จากสิ้นเคือนธันวาคม ไปถึงสิ้นเดือนกุมภาพันธ์ ส่วน spread ของน้ำมันดีเซล เพิ่มขึ้น 4% WoW เป็น US\$20.2/bbl แต่ spread ของน้ำมัน เครื่องบินลคลง 3% WoW เหลือ US\$24.5/bbl เรายังคงคาด ว่าคาการกลั่นของโรงกลั่นในประเทศจะอยู่ในเกณฑ์ดีใน 4Q66F แม้จะลดลง QoQ กีตาม ทั้งนี้เราเลือก PTT Oil and Retail Business (OR.BK/OR TB)* เป็นหุนเดนตัวใหมของ เราในกลุ่มนี้

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

Saowanee Khudsee (Assistant analyst) 66.2658.8888 Ext. 8848 saowaneek@kgi.co.th

Commodities Update

เรือพาณิชย์สองลำถูกโจมตีโดยกลุ่ม Houthi ของเยเมน

Event

อัพเดตสินคาโภคภัณฑ์ประจำสัปดาห์

Impact

ตลาดน้ำมันดิบ: เรือพาณิชย์ถูกโจมตีในทะเลแดง

ราคาน้ำมันคิบคู่ใบทรงตัว WoW อยู่ที่ US\$76.0/bbl เมื่อวันสุกร์ที่แล้ว แต่ดีคตัวขึ้นเล็กน้อยในช่วงต้น สัปดาห์นี้ จากความกลัววาอุปทานจะถูกกระทบหลังจากที่กองกำลังกลุ่ม Houthi ของเยเมนโจมตีเรือ พาณิชย์สองลำในทะเลแดง เพื่อแสดงการประท้วงต่อการที่อิสราเอลใช้กำลังทางทหารกับกลุ่ม Hamas ในฉนวน Gaza นอกจากนี้ รัสเซียยังบอกว่าจะลดการส่งออกน้ำมันคิบลงอีกประมาณ 50KBD ในเดือน ธันวาคม เร็วกว่าที่สัญญาใว้วาจะลดการผลิตโดยสมัครใจเพิ่ม 200KBD ใน 1Q67 เพื่อสนับสนุนราคา น้ำมันคิบในตลาดโลก ในขณะเดียวกันผลผลิตน้ำมันคิบของสหรัฐอังทรงตัว WoW อยู่ที่ 13.1MBD ในขณะที่จำนวนแทนขุดเจาะน้ำมันคิบของสหรัฐลดลง 2 แทน WoW เหลือ 501 แทน ส่วนสตีอก น้ำมันคิบเพื่อการพาณิชย์ของสหรัฐลดลงติดต่อกันเป็นสัปดาห์ที่สองอีก 4.3 ล้านบาร์เรล WoW เหลือ 441 ล้านบาร์เรล

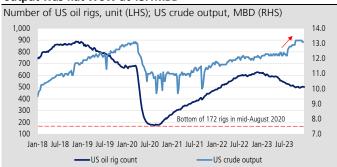
ตลาดโรงกลั่น: spread ของน้ำมันเบนซินและน้ำมันดีเซลดีขึ้น WoW

GRM ในตลาดสิงคโปร์ฟื้นตัวขึ้น 9% WoW เป็น US\$7.9/bbl เนื่องจาก spread ของน้ำมันเบนซินและ น้ำมันดีเซลสูงขึ้น โดย spread ของน้ำมันแบนซินเพิ่มขึ้น 9% WoW เป็น US\$14.4/bbl เนื่องจาก i) สต็อก น้ำมันเบนซินในสิงคโปร์ลดลง และ ii) การส่งออกน้ำมันจากเกาหลีใต้ลดลง หลังจากที่รัฐบาลขยายการ อุดหนุนน้ำมันเชื้อเพลิงออกไปอีกสองเดือน จากสิ้นเดือนธันวาคมไปถึงสิ้นเดือนกุมภาพันธ์ ส่วน spread ของน้ำมันดีเซลเพิ่มขึ้น 4% WoW เป็น US\$20.2/bbl แต่ spread ของน้ำมันเครื่องบินลดลง 3% WoW เหลือ US\$24.5/bbl โดย spread ของน้ำมันเครื่องบินและน้ำมันดีเซลยังได้แรงหนุนจาก i) สต็อกน้ำมัน กลุ่ม middle distillate ที่อยู่ในระดับต่ำ โดยต่ำกวาคาเฉลี่ยท้ำปีย้อนหลัง และ ii) อุปสงค์น้ำมันสูงตาม ฤลูกาลในหน้าหนาว ในขณะเดียวกันเรายังคงคาดว่าคาการกลั่นของโรงกลั่นในประเทศจะอยู่ในเกณฑ์ดี ใน 4Q66F แม้จะลดลง QoQ กีตาม

ตลาดปิโตรเคมี: spread ของ HDPE และ PET ลดลง แต่ spread ของ PP สูงขึ้น WoW

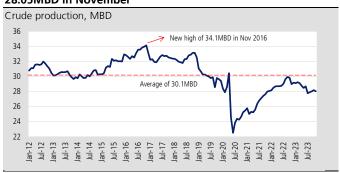
Spread ของ HDPE ลดลง 4% WoW เหลือ US\$334/ton แต่ spread ของ PP เพิ่มขึ้น 3% WoW เป็น US\$301/ton โดย spread ของทั้งสองผลิตภัณฑ์ยังอยู่ในเกณฑ์ที่ต่ำมาก (ต่ำกว่า US\$500/ton และ US\$550/ton ตามลำดับ) เนื่องจากจะมีกำลังการผลิต PE ใหม่เพิ่มเข้ามาในตลาดถึง 7.3 MTA ในปี 2566F และ 4.0MTA ในปี 2567F ในขณะที่จะมีกำลังการผลิต PP ใหม่เพิ่มเข้ามาในตลาดถึง 7.6MA ในปีนี้ และ 7.2MTA ในปีหน้า สำหรับตลาด polyester นั้น spread ของ PET ในเอเชียลดลง 9% WoW เหลือ US\$68/ton เนื่องจาก i) อุปสงค์ PET ต่ำตามฤดูกาลในช่วงหน้าหนาว และ ii) จะมีอุปทาน PET เพิ่มเข้า มาในตลาดอีกเป็นจำนวนมากถึง 2.0MTA ในปี 2566F และ 4.8MTA ในปี 2567F

Figure 1: US oil rig softened by 2 WoW to 501, while US crude output was flat WoW at 13.1MBD



Source: Baker Hughes, Bloomberg, KGI Securities Research

Figure 2: OPEC crude production dropped by 140KBD MoM to 28.05MBD in November



Source: Bloomberg, KGI Securities Research



Figure 3: Commodities Table

| Commodity-prices | Last | 1 Week | 2022 | %Cł | ng | | | Average | | | Related Stock |
|----------------------------------|-----------|----------|-----------|--------|--------|--------|-------|---------|--------|--------|------------------------------------|
| | 15-Dec-23 | 8-Dec-23 | 30-Dec-22 | WoW | YTD | 4QTD23 | 3Q23 | 2Q23 | 1Q23 | 4Q22 | |
| Crude | | | | | | | | | | | |
| Brent (US\$/bbl) | 77.0 | 75.8 | 85.0 | 1.6 | (9.3) | 84.7 | 87.3 | 78.1 | 81.3 | 88.5 | + PTTEP |
| Dubai (US\$/bbl) | 76.0 | 76.1 | 78.7 | (0.1) | (3.4) | 84.2 | 87.4 | 77.1 | 79.6 | 84.5 | - PTTEP |
| WTI (US\$/bbl) | 71.4 | 71.2 | 80.3 | 0.3 | (11.0) | 79.3 | 83.1 | 73.6 | 76.0 | 82.9 | + PTTEP |
| Tapis (US\$/bbl) | 82.3 | 81.6 | 89.4 | 0.9 | (7.9) | 89.3 | 91.1 | 80.3 | 85.8 | 97.3 | + PTTEP |
| Refinery | | | | | | | | | | | |
| Singapore GRM (US\$/bbl) | 7.9 | 7.2 | 10.2 | 9.2 | (22.7) | 5.1 | 9.6 | 4.0 | 8.2 | 6.4 | + TOP, PTTGC, BCP, IRPC, SPRC, ESS |
| Implied Thailand GRM (US\$/bbl)* | 7.4 | 6.8 | 13.2 | 8.8 | (43.8) | 6.8 | 11.2 | 3.5 | 9.0 | 12.7 | |
| Gasoline spread (US\$/bbl) | 14.4 | 13.2 | 14.9 | 9.3 | (3.4) | 12.5 | 18.9 | 16.6 | 18.7 | 9.4 | |
| let oil spread (US\$/bbl) | 24.5 | 25.3 | 37.6 | (3.2) | (34.9) | 23.9 | 26.1 | 14.0 | 26.5 | 33.5 | |
| Diesel spread (US\$/bbl) | 20.2 | 19.4 | 35.8 | 4.2 | (43.5) | 21.1 | 26.9 | 14.6 | 25.2 | 39.3 | |
| HSFO spread (US\$/bbl) | (7.8) | (8.5) | (16.8) | 8.0 | 53.5 | (10.9) | (5.4) | (8.7) | (16.3) | (22.5) | |
| LSFO spread (US\$/bbl) | 5.3 | 5.7 | 3.9 | (8.2) | 35.5 | 6.2 | 1.3 | 3.7 | 5.0 | 6.5 | |
| Petrochemical | | | | | | | | | | | |
| Olefins | | | | | | | | | | | |
| HDPE (US\$/ton) | 993 | 995 | 1,015 | (0.2) | (2.2) | 1,024 | 1,035 | 1,033 | 1,085 | 1,032 | - PTTGC |
| PP (US\$/ton) | 960 | 938 | 990 | 2.3 | (3.0) | 966 | 972 | 990 | 1,094 | 995 | + PTTGC |
| Naphtha (US\$/ton) | 659 | 646 | 647 | 2.0 | 1.8 | 657 | 648 | 600 | 688 | 673 | |
| Spread | | | | | | | | | | | |
| HDPE spread (US\$/ton) | 334 | 349 | 368 | (4.3) | (9.2) | 367 | 387 | 433 | 397 | 359 | - SCC, IRPC |
| PP spread (US\$/ton) | 301 | 292 | 343 | 3.1 | (12.2) | 309 | 324 | 391 | 406 | 322 | + SCC, IRPC |
| Aromatics | | | | | | | | | | | |
| PX (US\$/ton) | 973 | 972 | 950 | 0.1 | 2.5 | 1,015 | 1,073 | 1,027 | 1,035 | 977 | |
| BZ (US\$/ton) | 875 | 844 | 863 | 3.7 | 1.4 | 892 | 898 | 873 | 934 | 824 | |
| Spread | | | | | | | | | | | |
| PX spread (US\$/ton) | 314 | 326 | 302 | (3.7) | 3.9 | 358 | 425 | 428 | 347 | 304 | - PTTGC, TOP |
| BZ spread (US\$/ton) | 216 | 198 | 216 | 9.1 | 0.2 | 236 | 250 | 274 | 246 | 152 | + PTTGC, TOP |
| Polyesters | | | | | | | | | | | |
| PTA (US\$/ton) | 732 | 732 | 752 | 0.0 | (2.7) | 758 | 791 | 797 | 775 | 758 | |
| PET (US\$/ton) | 875 | 880 | 915 | (0.6) | (4.4) | 883 | 893 | 955 | 971 | 913 | |
| Spread | | | | | | | | | | | |
| PTA spread (US\$/ton) | 80 | 81 | 116 | (0.8) | (30.7) | 78 | 72 | 107 | 82 | 102 | - IVL |
| PET spread (US\$/ton) | 68 | 75 | 92 | (9.0) | (25.4) | 57 | 40 | 90 | 117 | 90 | - IVL |
| Integrated PET spread (US\$/ton) | 137 | 145 | 191 | (5.1) | (28.1) | 124 | 102 | 183 | 187 | 178 | - IVL |
| Coal | | | | | | | | | | | |
| Newcastle Coal (US\$/ton) | 162 | 140 | 404 | 15.8 | (59.8) | 133 | 149 | 160 | 252 | 388 | + BANPU |
| Gas | | | | | | | | | | | |
| Henry Hub (US\$/mmbtu) | 2.4 | 2.6 | 3.5 | (5.1) | (30.7) | 2.8 | 2.6 | 2.1 | 2.6 | 5.4 | |
| Dutch TTF (EUR/MWh) | 33.2 | 38.6 | 76.3 | (14.0) | (56.5) | 45.1 | 33.6 | 34.4 | 53.7 | 117.4 | |
| JKM Japan/Korea (US\$/mmbtu) | 16.0 | 16.4 | 33.0 | (2.5) | (51.4) | 16.5 | 12.5 | 11.2 | 18.1 | 31.9 | |

*We calculate implied Thailand GRM, based on yield of LPG (5%), ULG95 (15%), JO (15%), GO (45%), and HSFO (10%) plus Murban premium/discount (45%)

 ${\it Source: Bloomberg, BANPU Plc, PTTGC Plc, KGI Securities Research, www.dit.go.th}$

Aug23 Sep23

■ World demand

Oct23 Nov23F Dec23F



Figure 4: World crude supply & demand in 2023 (based on EIA's Novermber report)

| | Jan23 | Feb23 | Mar23 | Apr23 | May23 | Jun23 | Jul23 | Aug23 | Sep23 | Oct23 | Nov23F | Dec23F |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| World supply | 100.7 | 101.2 | 101.5 | 101.5 | 100.8 | 102.1 | 101.6 | 101.4 | 101.7 | 102.3 | 102.1 | 101.8 |
| World demand | 97.7 | 101.5 | 100.7 | 99.6 | 100.5 | 102.3 | 101.4 | 101.9 | 101.6 | 100.6 | 101.9 | 103.1 |

Source: EIA's STEO in November 2023, KGI Securities Research

World crude supply & demand in 2023, MBD

104
103
102
101
100
99
98
97
96
95
94

Jul23

Source: EIA's STEO in November 2023, KGI Securities Research

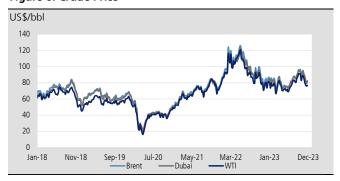
Feb23 Mar23 Apr23 May23 Jun23

■ World supply

Jan23

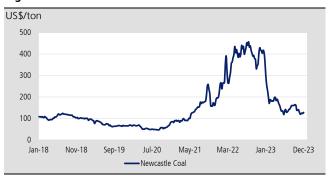


Figure 6: Crude Price



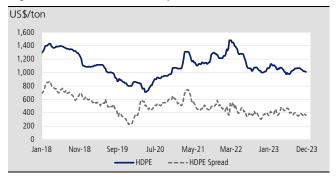
Source: Bloomberg

Figure 8: NEX Coal Price



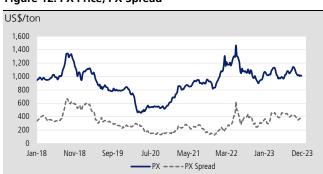
Source: BANPU

Figure 10: HDPE Price, HDPE Spread



Source: Bloomberg

Figure 12: PX Price, PX Spread



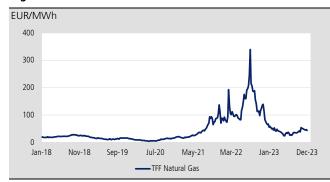
Source: Bloomberg

Figure 7: Singapore GRM



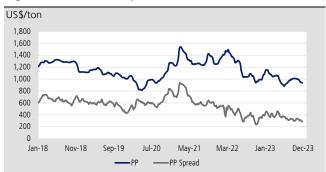
Source: Reuters

Figure 11: Dutch TFF Gas Price



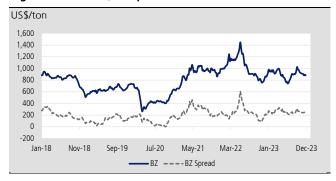
Source: Bloomberg

Figure 11: PP Price, PP Spread



Source: Bloomberg

Figure 13: BZ Price, BZ Spread



Source: Bloomberg



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 | Α |
| AOT | AIRPORTS OF THAILAND | Α | MAJOR | MAJOR CINEPLEX GROUP | AA |
| AP | AP (THAILAND) | AA | MEGA | MEGA LIFESCIENCES | Α |
| BAFS | BANGKOK AVIATION FUEL SERVICES PCL. | AA | MINT | MINOR INTERNATIONAL | AA |
| BAM | BANGKOK COMMERCIAL ASSET MANAGEMEN | AA | MTC | MUANGTHAI CAPITAL | Α |
| 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 | Α |
| CBG | CARABAO GROUP | Α | SAPPE | SAPPE | BBB |
| CENTEL | CENTRAL PLAZA HOTEL | Α | SAT | SOMBOON ADVANCE TECHNOLOGY | AA |
| CK | CH. KARNCHANG | Α | SAWAD | SRISAWAD CORPORATION | BBB |
| CKP | CK POWER | AAA | SCB | SCB X | AA |
| COM7 | COM7 | Α | 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 | Α |
| CPN | CENTRAL PATTANA | AA | SICT | SILICON CRAFT TECHNOLOGY | Α |
| EGCO | ELECTRICITY GENERATING | AA | SMPC | SAHAMITR PRESSURE CONTAINER | AA |
| ERW | THE ERAWAN GROUP | Α | SNC | SNC FORMER | Α |
| GFPT | GFPT | BBB | SPALI | SUPALAI | AA |
| | SIAM GLOBAL HOUSE | AA | STEC | SINO-THAI ENGINEERING AND CONSTRUCTION | Α |
| GPSC | GLOBAL POWER SYNERGY | AA | STGT | SRI TRANG GLOVES (THAILAND) | AAA |
| GULF | GULF ENERGY DEVELOPMENT | AA | TCAP | THANACHART CAPITAL | Α |
| HANA | HANA MICROELECTRONICS | AA | TFG | THAIFOODS GROUP | Α |
| HENG | HENG LEASING AND CAPITAL | Α | тнсом | 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 | Α |
| 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

| A | • | • | A | A |
|------------------|------------------|---|----------|---------------|
| | O | | | |
| medicile medecil | - Administration | | | - telepoole d |

Companies with Excellent CG Scoring

| Stock | Company name | Stock | Company name | Stock | Company name |
|--------|-------------------------------------|--------|--------------------------|--------|--|
| AAV | ASIA AVIATION | | | 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 | SEAFCO | SEAFCO |
| BAM | BANGKOK COMMERCIAL ASSET MANAGEMEN | 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 | | KKP | KIATNAKIN PHATRA BANK | SPALI | SUPALAI |
| BDMS | | КТВ | KRUNG THAI BANK | SPRC | STAR PETROLEUM REFINING |
| BEM | | KTC | | STEC | SINO-THAI ENGINEERING AND CONSTRUCTION |
| | - | LPN | - | STGT | SRI TRANG GLOVES (THAILAND) |
| BPP | | MAJOR | | SUN | SUNSWEET |
| BTS | | MBK | | SVI | SVI |
| | | MINT | | TACC | T.A.C. CONSUMER |
| CK | | MTC | | TCAP | THANACHART CAPITAL |
| CKP | | OR | | THCOM | THAICOM |
| COM7 | | ORI | | TISCO | TISCO FINANCIAL GROUP |
| | = | OSP | | TKN | TAOKAENOI FOOD & MARKETING |
| _ | | PLANB | | TOP | THAI OIL |
| CPF | | PSH | | TTB | TMBTHANACHART BANK |
| CPN | | PTG | | TU | THAI UNION GROUP |
| | , | PTT | 1 * * * * | VGI | VGI |
| | | PTTEP | | WHA | WHA CORPORATION |
| | | PTTGC | | WHAUP | WHA UTILITIES AND POWER |
| GFPT | = | 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 | М | 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 | хо | 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 | KASIKORNBANK | 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 | SEAFCO | SEAFCO |
| ВН | 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 |
| CENTEL | 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

| S | tock | Company name | Stock | Company name | Stock | Company name |
|---|------|------------------------------|-------|-------------------|-------|-------------------------|
| В | EM | BANGKOK EXPRESSWAY AND METRO | MTLS | MUANGTHAI LEASING | SPRC | STAR PETROLEUM REFINING |
| c | PALL | CP ALL | scı | SCI ELECTRIC | | |

No progress

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

Source: 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.



| Thailand | Contact |
|----------|---------|

KGI Locations

| D-4! | | D. C. W |
|-----------|----------|---|
| Singapore | • | 4 Shenton Way #13-01 SGX Centre 2 Singapore 068807 Telephone 65.6202.1188 Facsimile 65.6534.4826 |
| Thailand | Bangkok | 8th - 11th floors, Asia Centre Building 173 South Sathorn Road, Bangkok 10120, Thailand Telephone 66.2658.8888 Facsimile 66.2658.8014 |
| Hong Kon | g | 41/F Central Plaza, 18 Harbour Road, Wanchai, Hong Kong Telephone 852.2878.6888 Facsimile 852.2878.6800 |
| Taiwan | Taipei | 700 Mingshui Road, Taipei, Taiwan Telephone 886.2.2181.8888 · Facsimile 886.2.8501.1691 |
| | Shenzhen | Room 24D1, 24/F, A Unit, Zhen Ye Building, 2014 Bao'annan Road, Shenzhen, PRC 518008 |
| China | Shanghai | Room 2703B-2704, Tower A , Shanghai Dawning Centre,500 Hongbaoshi Road Shanghai, PRC 201103 |

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. |

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.